

# RISING 'TH SUMMER SPEED DRILLS

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f a ka gd f W̄ UZ W̄ Vgd [ ` Y f Z W̄ def i W̄ a XeUZ a a ^ž

d[e]` Y 'fZ eg\_ \_ Wd fSdYW f[\_ We,  
 SVV[f[a ` I egTf dSUf [a ` I & \_ g ^f [b ^[USf [a ` Ž3 1/2 \_ [` gfWe  
 DIVISION Ž4 \_ [` gfWe

- 1 MULTIPLES & MULTIPLIERS THROUGH 12
  - 2 DIVIDENDS THROUGH 12
  - 3 ADDENDS THROUGH 18
  - 4 MINUENDS THROUGH 18
  - 5 MULTIPLES & MULTIPLIERS THROUGH 12
  - 6 DIVIDENDS THROUGH 12
  - 7 MULTIPLES & MULTIPLIERS THROUGH 12
  - 8 DIVIDENDS THROUGH 12
  - 9 ADDENDS THROUGH 18
  - 10 MINUENDS THROUGH 18
  - 11 MULTIPLES & MULTIPLIERS THROUGH 12
  - 12 DIVIDENDS THROUGH 12



## Worksheet 1

## MULTIPLES & MULTIPLIERS THROUGH 12

$$1) \quad \begin{array}{cccccccccc} & 1 & & 9 & & 7 & & 9 & & 5 & \\ & \times & 9 & & \times & 10 & & 1 & & 2 & \\ \hline & 9 & & 10 & & 7 & & 9 & & 5 & \end{array}$$

$$2) \quad \begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 4 \\ \times 12 \\ \hline 48 \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline 96 \end{array} \quad \begin{array}{r} 7 \\ \times 9 \\ \hline 63 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 12 \\ \times 11 \\ \hline 132 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array} \quad \begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$$

$$3) \quad \begin{array}{cccccccccccc} 12 & 9 & 12 & 10 & 3 & 9 & 2 & 12 & 12 & 9 \\ x \ 9 & x \ 10 & x \ 12 & x \ 10 & x \ 9 & x \ 5 & x \ 11 & x \ 11 & x \ 12 & x \ 2 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 11 & & 5 & & 5 & & 12 & & 6 & & 5 & & 4 & & 8 & & 11 & & 10 \\ x & 5 & x & 10 & x & 6 & x & 10 & x & 2 & x & 10 & x & 8 & x & 4 & x & 7 & x & 7 \end{array}$$

$$5) \quad \begin{array}{cccccccccccccc} 8 & & 5 & & 11 & & 9 & & 4 & & 2 & & 1 & & 8 & & 7 & & 12 \\ x & 5 & x & 9 & x & 12 & x & 11 & x & 8 & x & 12 & x & 3 & x & 4 & x & 8 & x & 4 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} & 10 & & 12 & & 11 & & 4 & & 5 & & 4 & & 8 & & 7 & & 9 & & 8 \\ x & 4 & x & 1 & x & 5 & x & 2 & x & 2 & x & 10 & x & 10 & x & 9 & x & 11 & x & 6 \end{array}$$

$$7) \quad \begin{array}{ccccccccccccc} 11 & 11 & 10 & 8 & 7 & 6 & 1 & 6 & 8 & 7 \\ \times & 7 & \times & 4 & \times & 6 & \times & 5 & \times & 3 & \times & 10 & \times & 11 & \times & 3 \end{array}$$

$$8) \quad \begin{matrix} 4 & 6 & 4 & 11 & 5 & 6 & 3 & 6 & 5 & 10 \\ x & 5 & 4 & 4 & 2 & 6 & 9 & 10 & 3 & 2 & 11 \end{matrix}$$

$$9) \quad \begin{matrix} 1 & 4 & 12 & 10 & 12 & 9 & 9 & 7 & 9 & 10 & 1 \end{matrix} \quad \begin{matrix} -12 & -4 & -11 & -1 & -9 & -9 & -2 & -3 & -11 & -6 \end{matrix}$$

10)      9            3            2            11            6            11            3            12            4            7  
       7            10            2            5            4            7            11            12            11            12

## Worksheet 1

## MULTIPLES & MULTIPLIERS THROUGH 12

$$1) \quad \begin{array}{r} 1 \\ \times 9 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ \times 10 \\ \hline 10 \end{array} \quad \begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 9 \\ \times 12 \\ \hline 12 \end{array} \quad \begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ \times 9 \\ \hline 18 \end{array} \quad \begin{array}{r} 5 \\ \times 8 \\ \hline 40 \end{array} \quad \begin{array}{r} 10 \\ \times 11 \\ \hline 110 \end{array} \quad \begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array} \quad \begin{array}{r} 9 \\ \times 11 \\ \hline 99 \end{array}$$

$$2) \quad \begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 4 \\ \times 12 \\ \hline 48 \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline 96 \end{array} \quad \begin{array}{r} 7 \\ \times 9 \\ \hline 63 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 12 \\ \times 11 \\ \hline 132 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array} \quad \begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array} \quad \begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} & 12 & & 9 & & 12 & & 10 & & 3 & & 9 & & 2 & & 12 & & 12 & & 9 \\ x & 9 & x & 10 & x & 12 & x & 10 & x & 9 & x & 5 & x & 11 & x & 11 & x & 12 & x & 2 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 11 & & 5 & & 5 & & 12 & & 6 & & 5 & & 4 & & 8 & & 11 & & 10 \\ x & 5 & x & 10 & x & 6 & x & 10 & x & 2 & x & 10 & x & 8 & x & 4 & x & 7 & x & 7 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} 8 & & 5 & & 11 & & 9 & & 4 & & 2 & & 1 & & 8 & & 7 & & 12 \\ x & 5 & x & 9 & x & 12 & x & 11 & x & 8 & x & 12 & x & 3 & x & 4 & x & 8 & x & 4 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} & 10 & & 12 & & 11 & & 4 & & 5 & & 4 & & 8 & & 7 & & 9 & & 8 \\ x & 4 & x & 1 & x & 5 & x & 2 & x & 2 & x & 10 & x & 10 & x & 9 & x & 11 & x & 6 \end{array}$$

$$7) \quad \begin{array}{ccccccccccccccccc} & 11 & & 11 & & 10 & & 8 & & 7 & & 6 & & 1 & & 6 & & 8 & & 4 \\ \times & 7 & & 4 & & 6 & & 5 & & 3 & & 10 & & 10 & & 11 & & 7 & & 3 \end{array}$$

$$8) \quad \begin{matrix} 4 & 6 & 4 & 11 & 5 & 6 & 3 & 6 & 5 & 10 \\ x & 5 & 4 & 4 & 2 & 6 & 9 & 10 & 3 & 2 & 11 \end{matrix}$$

$$9) \quad \begin{matrix} 1 & 4 & 12 & 10 & 12 & 9 & 9 & 7 & 9 & 10 & 1 \end{matrix} \quad \begin{matrix} -12 & -4 & -11 & -1 & -9 & -9 & -2 & -3 & -11 & -6 \end{matrix}$$

10)      9            3            2            11            6            11            3            12            4            7  
      7            10            2            5            4            7            11            12            11            12

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## DIVIDENDS THROUGH 12

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3)

$$12 \overline{)132}$$

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7)

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$$8 \overline{)96}$$

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12)

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13)

$$3 \overline{)9}$$

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## ADDENDS THROUGH 18

$$1) \quad \begin{array}{r} 17 \\ + 5 \\ \hline 22 \end{array} \quad \begin{array}{r} 12 \\ + 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 17 \\ + 6 \\ \hline 23 \end{array} \quad \begin{array}{r} 6 \\ + 5 \\ \hline 11 \end{array} \quad \begin{array}{r} 13 \\ + 6 \\ \hline 19 \end{array} \quad \begin{array}{r} 11 \\ + 3 \\ \hline 14 \end{array} \quad \begin{array}{r} 6 \\ + 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 0 \\ + 4 \\ \hline 4 \end{array} \quad \begin{array}{r} 18 \\ + 10 \\ \hline 28 \end{array} \quad \begin{array}{r} 13 \\ + 15 \\ \hline 28 \end{array}$$

$$2) \quad \begin{array}{r} 0 \\ + 6 \\ \hline 12 \end{array} \quad \begin{array}{r} 0 \\ + 8 \\ \hline 16 \end{array} \quad \begin{array}{r} 14 \\ + 4 \\ \hline 18 \end{array} \quad \begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array} \quad \begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} \quad \begin{array}{r} 16 \\ + 2 \\ \hline 18 \end{array} \quad \begin{array}{r} 5 \\ + 0 \\ \hline 5 \end{array} \quad \begin{array}{r} 4 \\ + 1 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ + 0 \\ \hline 3 \end{array}$$

$$3) \quad \begin{array}{cccccccccccccc} 11 & 11 & 9 & 9 & 6 & 1 & 3 & 9 & 18 & 17 \\ + 10 & + 8 & + 7 & + 16 & + 11 & + 8 & + 13 & + 6 & + 10 & + 10 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 14 & & 15 & & 6 & & 1 & & 10 & & 2 & & 10 & & 16 & & 2 & & 6 \\ + 12 & & + 8 & & + 12 & & + 9 & & + 3 & & + 8 & & + 14 & & + 6 & & + 1 & & + 13 \end{array}$$

$$5) \quad \begin{array}{cccccccccccc} 16 & 18 & 7 & 17 & 9 & 16 & 13 & 3 & 12 & 16 \\ + 14 & + 3 & + 7 & + 8 & + 10 & + 11 & + 10 & + 1 & + 9 & + 4 \end{array}$$

$$6) \quad \begin{matrix} 2 & 5 & 4 & 14 & 12 & 16 & 3 & 14 & 11 & 8 \\ + 5 & + 1 & + 14 & + 11 & + 12 & + 4 & + 3 & + 1 & + 18 & + 2 \end{matrix}$$

$$7) \quad \begin{array}{cccccccccccc} 14 & 8 & 14 & 7 & 11 & 12 & 5 & 11 & 10 & 10 \\ + 16 & + 6 & + 16 & + 17 & + 16 & + 14 & + 12 & + 14 & + 11 & + 2 \end{array}$$

$$8) \quad \begin{array}{ccccccccccccc} 11 & 1 & 11 & 0 & 9 & 2 & 13 & 10 & 2 & 2 \\ + 9 & + 13 & + 15 & + 1 & + 3 & + 4 & + 10 & + 7 & + 9 & + 14 \end{array}$$

$$9) \quad \begin{array}{ccccccccccccc} 18 & & 6 & & 6 & & 1 & & 17 & & 6 & & 1 & & 11 & & 2 \\ + & 6 & + & 9 & + & 14 & + & 4 & + & 13 & + & 5 & + & 14 & + & 13 & + & 18 & + & 15 \end{array}$$

10)      7      14      13      10      0      2      16      16      15      4  
      1      9      16      11      6      8      17      1      9      6

$$1) \quad \begin{array}{r} 17 \\ + 5 \\ \hline 22 \end{array} \quad \begin{array}{r} 12 \\ + 4 \\ \hline 16 \end{array} \quad \begin{array}{r} 17 \\ + 6 \\ \hline 23 \end{array} \quad \begin{array}{r} 6 \\ + 5 \\ \hline 11 \end{array} \quad \begin{array}{r} 13 \\ + 6 \\ \hline 19 \end{array} \quad \begin{array}{r} 11 \\ + 3 \\ \hline 14 \end{array} \quad \begin{array}{r} 6 \\ + 1 \\ \hline 7 \end{array} \quad \begin{array}{r} 0 \\ + 4 \\ \hline 4 \end{array} \quad \begin{array}{r} 18 \\ + 10 \\ \hline 28 \end{array} \quad \begin{array}{r} 13 \\ + 15 \\ \hline 28 \end{array}$$

$$2) \quad \begin{array}{r} 0 \\ + 6 \\ \hline 12 \end{array} \quad \begin{array}{r} 0 \\ + 8 \\ \hline 16 \end{array} \quad \begin{array}{r} 14 \\ + 4 \\ \hline 18 \end{array} \quad \begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array} \quad \begin{array}{r} 7 \\ + 7 \\ \hline 14 \end{array} \quad \begin{array}{r} 16 \\ + 2 \\ \hline 18 \end{array} \quad \begin{array}{r} 5 \\ + 0 \\ \hline 5 \end{array} \quad \begin{array}{r} 4 \\ + 1 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ + 0 \\ \hline 3 \end{array}$$

$$3) \quad \begin{array}{cccccccccccccc} 11 & 11 & 9 & 9 & 6 & 1 & 3 & 9 & 18 & 17 \\ + 10 & + 8 & + 7 & + 16 & + 11 & + 8 & + 13 & + 6 & + 10 & + 10 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} & 14 & & 15 & & 6 & & 1 & & 10 & & 2 & & 10 & & 16 & & 2 & & 6 \\ & + 12 & & + 8 & & + 12 & & + 9 & & + 3 & & + 8 & & + 14 & & + 6 & & + 1 & & + 13 \end{array}$$

$$5) \quad \begin{array}{cccccccccccccc} 16 & 18 & 7 & 17 & 9 & 16 & 13 & 3 & 12 & 16 \\ + 14 & + 3 & + 7 & + 8 & + 10 & + 11 & + 10 & + 1 & + 9 & + 4 \end{array}$$

$$6) \quad \begin{matrix} 2 & 5 & 4 & 14 & 12 & 16 & 3 & 14 & 11 & 8 \\ + 5 & + 1 & + 14 & + 11 & + 12 & + 4 & + 3 & + 1 & + 18 & + 2 \end{matrix}$$

$$7) \quad \begin{array}{cccccccccccc} 14 & 8 & 14 & 7 & 11 & 12 & 5 & 11 & 10 & 10 \\ + 16 & + 6 & + 16 & + 17 & + 16 & + 14 & + 12 & + 14 & + 11 & + 2 \end{array}$$

$$8) \quad \begin{array}{ccccccccccccc} 11 & 1 & 11 & 0 & 9 & 2 & 13 & 10 & 2 & 2 \\ + 9 & + 13 & + 15 & + 1 & + 3 & + 4 & + 10 & + 7 & + 9 & + 14 \end{array}$$

$$9) \quad \begin{array}{ccccccccccccc} 18 & & 6 & & 6 & & 1 & & 17 & & 6 & & 1 & & 11 & & 2 & & 2 \\ + & 6 & + & 9 & + & 14 & + & 4 & + & 13 & + & 5 & + & 14 & + & 13 & + & 18 & + & 15 \end{array}$$

10)      7      14      13      10      0      2      16      16      15      4  
         1      9      16      11      6      8      17      1      9      6

## Worksheet 4

## MINUENDS THROUGH 18

$$1) \quad \begin{array}{ccccccccccccc} & 1 & & 10 & & 7 & & 1 & & 16 & & 18 & & 2 & & 5 & & 13 & & 18 \\ & -\underline{1} & & -\underline{6} & & -\underline{6} & & -\underline{1} & & -\underline{5} & & -\underline{11} & & -\underline{1} & & -\underline{1} & & -\underline{7} & & -\underline{5} \end{array}$$

$$2) \quad \begin{array}{r} 2 \\ - 2 \end{array} \quad \begin{array}{r} 14 \\ - 4 \end{array} \quad \begin{array}{r} 12 \\ - 4 \end{array} \quad \begin{array}{r} 10 \\ - 5 \end{array} \quad \begin{array}{r} 6 \\ - 4 \end{array} \quad \begin{array}{r} 3 \\ - 1 \end{array} \quad \begin{array}{r} 5 \\ - 5 \end{array} \quad \begin{array}{r} 3 \\ - 3 \end{array} \quad \begin{array}{r} 5 \\ - 2 \end{array} \quad \begin{array}{r} 9 \\ - 7 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccc} 8 & 18 & 5 & 10 & 9 & 11 & 17 & 1 & 7 & 11 \\ -4 & -8 & -4 & -10 & -3 & -1 & -16 & -1 & -6 & -2 \end{array}$$

$$4) \quad \begin{matrix} 9 & 4 & 9 & 5 & 11 & 1 & 11 & 8 & 13 & 12 \\ -3 & -4 & -3 & -2 & -4 & -1 & -7 & -8 & -9 & -11 \end{matrix}$$

$$5) \quad \begin{array}{cccccccccccccc} 17 & 16 & 11 & 10 & 8 & 6 & 18 & 7 & 11 & 6 \\ -7 & -5 & -8 & -6 & -4 & -4 & -11 & -6 & -10 & -5 \end{array}$$

$$6) \quad \begin{matrix} 8 & 18 & 14 & 17 & 7 & 10 & 15 & 16 & 6 & 16 \\ -1 & -6 & -7 & -12 & -4 & -1 & -2 & -11 & -2 & -10 \end{matrix}$$

$$7) \quad \begin{array}{ccccccccccccc} 10 & & 1 & & 18 & & 5 & & 11 & & 16 & & 15 & & 2 & & 3 & & 8 \\ \hline - & 7 & - & 1 & - & 16 & - & 4 & - & 8 & - & 16 & - & 15 & - & 2 & - & 3 & - & 8 \end{array}$$

$$8) \quad \begin{matrix} 10 & 4 & 5 & 1 & 15 & 17 & 15 & 15 & 1 \\ -3 & -1 & -3 & -1 & -6 & -17 & -4 & -8 & -1 & -2 \end{matrix}$$

$$9) \quad \begin{matrix} 13 & 9 & 4 & 10 & 6 & 15 & 12 & 18 & 4 & 1 \\ 2 & 6 & 3 & 1 & 1 & 12 & 12 & 8 & 1 & 1 \end{matrix}$$

$$10) \quad \begin{matrix} 17 & 5 & 6 & 14 & 5 & 3 & 14 & 7 & 3 & 15 \\ 12 & 4 & 5 & 5 & 2 & 1 & 7 & 5 & 2 & 1 \end{matrix}$$

$$1) \quad \begin{array}{cccccccccc} 1 & -10 & 7 & 1 & -16 & -18 & 2 & 5 & -13 & -18 \\ -\frac{1}{1} & -\frac{6}{6} & -\frac{1}{6} & -\frac{1}{5} & -\frac{11}{5} & -\frac{1}{11} & -\frac{1}{1} & -\frac{1}{7} & -\frac{1}{7} & -\frac{5}{5} \end{array}$$

$$2) \quad -\frac{2}{2} \quad -\frac{14}{4} \quad -\frac{12}{4} \quad -\frac{10}{5} \quad -\frac{6}{4} \quad -\frac{3}{1} \quad -\frac{5}{5} \quad -\frac{3}{3} \quad -\frac{5}{2} \quad -\frac{9}{7}$$

$$3) \quad \begin{array}{ccccccccccccc} 8 & 18 & 5 & 10 & 9 & 11 & 17 & 1 & 7 & 11 \\ -4 & -8 & -4 & -10 & -3 & -1 & -16 & -1 & -6 & -2 \end{array}$$

$$4) \quad \begin{array}{cccccccccccc} 9 & 4 & 9 & 5 & 11 & 1 & 11 & 8 & 13 & 12 \\ -3 & -4 & -3 & -2 & -4 & -1 & -7 & -8 & -9 & -11 \end{array}$$

$$5) \quad \begin{matrix} 17 & 16 & 11 & 10 & 8 & 6 & 18 & 7 & 11 & 6 \\ -7 & -5 & -8 & -6 & -4 & -4 & -11 & -6 & -10 & -5 \end{matrix}$$

$$6) \quad \begin{matrix} 8 & 18 & 14 & 17 & 7 & 10 & 15 & 16 & 6 & 16 \\ -1 & -6 & -7 & -12 & -4 & -1 & -2 & -11 & -2 & -10 \end{matrix}$$

$$7) \quad \begin{matrix} 10 & 1 & 18 & 5 & 11 & 16 & 15 & 2 & 3 & 8 \\ -7 & -1 & -16 & -4 & -8 & -16 & -15 & -2 & -3 & -8 \end{matrix}$$

$$8) \quad \begin{matrix} 10 & 4 & 5 & 1 & 15 & 17 & 15 & 15 & 1 & 5 \\ -3 & -1 & -3 & -1 & -6 & -17 & -4 & -8 & -1 & -2 \end{matrix}$$

$$9) \quad \begin{matrix} 13 & 9 & 4 & 10 & 6 & 15 & 12 & 18 & 4 & 1 \\ -5 & -2 & -5 & -3 & -1 & -12 & -12 & -8 & -1 & -1 \end{matrix}$$

$$10) \quad \begin{matrix} 17 & 5 & 6 & 14 & 5 & 3 & 14 & 7 & 3 & 15 \\ 13 & 4 & 5 & 5 & 2 & 1 & 7 & 5 & 3 & 1 \end{matrix}$$

$$1) \quad \begin{array}{r} 9 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 11 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 10 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 12 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array} \quad \begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline 60 \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array} \quad \begin{array}{r} 9 \\ \times 1 \\ \hline 9 \end{array} \quad \begin{array}{r} 2 \\ \times 11 \\ \hline 22 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} 8 & 6 & 11 & 1 & 2 & 10 & 5 & 6 & 10 & 11 \\ x\ 2 & x\ 10 & x\ 9 & x\ 12 & x\ 8 & x\ 3 & x\ 3 & x\ 12 & x\ 8 & x\ 11 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} & 1 & & 11 & & 7 & & 9 & & 6 & & 6 & & 6 & & 8 & & 12 & & 3 \\ x & 8 & x & 6 & x & 7 & x & 12 & x & 4 & x & 7 & x & 8 & x & 1 & x & 11 & x & 4 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} 5 & & 6 & & 8 & & 7 & & 2 & & 6 & & 2 & & 6 & & 8 & & 4 \\ x & 4 & x & 2 & x & 3 & x & 10 & x & 8 & x & 7 & x & 11 & x & 3 & x & 11 & x & 8 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} & 2 & & 4 & & 12 & & 2 & & 1 & & 7 & & 6 & & 7 & & 9 & & 6 \\ x & 11 & x & 4 & x & 1 & x & 1 & x & 9 & x & 1 & x & 2 & x & 7 & x & 6 & x & 1 \end{array}$$

$$7) \quad \begin{array}{ccccccccccccccccc} & 5 & & 3 & & 6 & & 10 & & 7 & & 5 & & 6 & & 6 & & 4 & & 2 \\ x & 10 & x & 3 & x & 3 & x & 7 & x & 12 & x & 6 & x & 12 & x & 4 & x & 4 & x & 4 \end{array}$$

$$8) \quad \begin{matrix} & 1 & & 9 & & 9 & & 6 & & 4 & & 11 & & 5 & & 2 & & 7 & & 4 \\ & \times & 1 & & \times & 2 & & \times & 2 & & \times & 12 & & \times & 5 & & \times & 5 & & \times & 11 & & \times & 8 & & \times & 4 & & \times & 11 \end{matrix}$$

$$10) \quad \begin{matrix} 12 & 5 & 2 & 7 & 10 & 2 & 3 & 4 & 4 & 7 \\ 1 & 2 & 7 & 10 & 7 & 2 & 11 & 2 & 12 & 2 \end{matrix}$$

## Worksheet 5

## MULTIPLES & MULTIPLIERS THROUGH 12

$$1) \quad \begin{array}{r} 9 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 11 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 10 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 12 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array} \quad \begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline 60 \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array} \quad \begin{array}{r} 9 \\ \times 1 \\ \hline 9 \end{array} \quad \begin{array}{r} 2 \\ \times 11 \\ \hline 22 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} 8 & 6 & 11 & 1 & 2 & 10 & 5 & 6 & 10 & 11 \\ x\ 2 & x\ 10 & x\ 9 & x\ 12 & x\ 8 & x\ 3 & x\ 3 & x\ 12 & x\ 8 & x\ 11 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} & 1 & & 11 & & 7 & & 9 & & 6 & & 6 & & 6 & & 8 & & 12 & & 3 \\ x & 8 & x & 6 & x & 7 & x & 12 & x & 4 & x & 7 & x & 8 & x & 1 & x & 11 & x & 4 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} 5 & & 6 & & 8 & & 7 & & 2 & & 6 & & 2 & & 6 & & 8 & & 4 \\ x & 4 & x & 2 & x & 3 & x & 10 & x & 8 & x & 7 & x & 11 & x & 3 & x & 11 & x & 8 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} & 2 & & 4 & & 12 & & 2 & & 1 & & 7 & & 6 & & 7 & & 9 & & 6 \\ x & 11 & x & 4 & x & 1 & x & 1 & x & 9 & x & 1 & x & 2 & x & 7 & x & 6 & x & 1 \end{array}$$

$$7) \quad \begin{array}{ccccccccccccc} 5 & & 3 & & 6 & & 10 & & 7 & & 5 & & 6 & & 6 & & 4 & & 2 \\ x & 10 & x & 3 & x & 3 & x & 7 & x & 12 & x & 6 & x & 12 & x & 4 & x & 4 & x & 4 \end{array}$$

$$8) \quad \begin{matrix} & 1 & & 9 & & 9 & & 6 & & 4 & & 11 & & 5 & & 2 & & 7 & & 4 \\ & \times & 1 & & \times & 2 & & \times & 2 & & \times & 12 & & \times & 5 & & \times & 5 & & \times & 11 & & \times & 8 & & \times & 4 & & \times & 11 \end{matrix}$$

$$10) \quad 12 \quad 5 \quad 2 \quad 7 \quad 10 \quad 2 \quad 3 \quad 4 \quad 4 \quad 7 \\ \quad 1 \quad 2 \quad 7 \quad 10 \quad 7 \quad 2 \quad 11 \quad 2 \quad 12 \quad 2$$

## DIVIDENDS THROUGH 12

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## Worksheet 7

## MULTIPLES & MULTIPLIERS THROUGH 12

$$1) \quad \begin{array}{r} 8 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 11 \\ \times 2 \\ \hline 22 \end{array} \quad \begin{array}{r} 4 \\ \times 11 \\ \hline 44 \end{array} \quad \begin{array}{r} 3 \\ \times 10 \\ \hline 30 \end{array} \quad \begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array} \quad \begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array} \quad \begin{array}{r} 10 \\ \times 6 \\ \hline 60 \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 11 \\ \times 10 \\ \hline 110 \end{array} \quad \begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array} \quad \begin{array}{r} 7 \\ \times 11 \\ \hline 77 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} 1 & & 8 & & 2 & & 4 & & 10 & & 8 & & 8 & & 4 & & 6 & & 12 \\ x & 3 & x & 6 & x & 8 & x & 1 & x & 1 & x & 10 & x & 9 & x & 4 & x & 6 & x & 3 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} & 6 & & 7 & & 5 & & 6 & & 12 & & 2 & & 2 & & 10 & & 10 & & 5 & & 11 \\ x & 3 & x & 11 & x & 2 & x & 4 & x & 2 & x & 2 & x & 7 & x & 12 & x & 5 & x & 6 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} 6 & & 4 & & 6 & & 12 & & 8 & & 1 & & 5 & & 12 & & 7 & & 9 \\ x & 1 & x & 12 & x & 12 & x & 11 & x & 6 & x & 8 & x & 6 & x & 4 & x & 12 & x & 6 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} 3 & & 9 & & 4 & & 8 & & 1 & & 6 & & 4 & & 11 & & 3 & & 8 \\ x & 3 & x & 3 & x & 3 & x & 10 & x & 10 & x & 10 & x & 5 & x & 11 & x & 5 & x & 1 \end{array}$$

$$7) \quad \begin{matrix} 3 & 10 & 2 & 7 & 11 & 3 & 7 & 3 & 7 & 3 \\ \times 5 & \times 4 & \times 7 & \times 1 & \times 12 & \times 4 & \times 1 & \times 2 & \times 10 & \times 5 \end{matrix}$$

$$8) \quad \begin{array}{ccccccccccccc} 7 & & 3 & & 8 & & 3 & & 2 & & 7 & & 1 & & 10 & & 11 & & 2 \\ x & 8 & x & 10 & x & 2 & x & 9 & x & 12 & x & 7 & x & 9 & x & 1 & x & 5 & x & 2 \end{array}$$

$$9) \quad \begin{matrix} 7 & 1 & 10 & 2 & 8 & 9 & 2 & 6 & 5 & 9 \\ \times 12 & \times 2 & \times 8 & \times 9 & \times 11 & \times 9 & \times 9 & \times 2 & \times 2 & \times 5 \end{matrix}$$

$$10) \quad \begin{matrix} 7 & 1 & 9 & 12 & 2 & 2 & 1 & 3 & 3 & 1 \\ 1 & 4 & 12 & 11 & 10 & 4 & 10 & 2 & 2 & 6 \end{matrix}$$

## MULTIPLES & MULTIPLIERS THROUGH 12

$$1) \quad \begin{array}{r} 8 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 11 \\ \times 2 \\ \hline 22 \end{array} \quad \begin{array}{r} 4 \\ \times 11 \\ \hline 44 \end{array} \quad \begin{array}{r} 3 \\ \times 10 \\ \hline 30 \end{array} \quad \begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array} \quad \begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array} \quad \begin{array}{r} 10 \\ \times 6 \\ \hline 60 \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array} \quad \begin{array}{r} 11 \\ \times 10 \\ \hline 110 \end{array} \quad \begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array} \quad \begin{array}{r} 7 \\ \times 11 \\ \hline 77 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} 1 & 8 & 2 & 4 & 10 & 8 & 8 & 4 & 6 & 12 \\ x 3 & x 6 & x 8 & x 1 & x 1 & x 10 & x 9 & x 4 & x 6 & x 3 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 6 & & 7 & & 5 & & 6 & & 12 & & 2 & & 10 & & 10 & & 5 & & 11 \\ x & 3 & x & 11 & x & 2 & x & 4 & x & 2 & x & 2 & x & 7 & x & 12 & x & 5 & x & 6 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} 6 & & 4 & & 6 & & 12 & & 8 & & 1 & & 5 & & 12 & & 7 & & 9 \\ x & 1 & x & 12 & x & 12 & x & 11 & x & 6 & x & 8 & x & 6 & x & 4 & x & 12 & x & 6 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} 3 & & 9 & & 4 & & 8 & & 1 & & 6 & & 4 & & 11 & & 3 & & 8 \\ x & 3 & x & 3 & x & 3 & x & 10 & x & 10 & x & 10 & x & 5 & x & 11 & x & 5 & x & 1 \end{array}$$

$$7) \quad \begin{matrix} 3 & 10 & 2 & 7 & 11 & 3 & 7 & 3 & 7 & 3 \\ \times 5 & \times 4 & \times 7 & \times 1 & \times 12 & \times 4 & \times 1 & \times 2 & \times 10 & \times 5 \end{matrix}$$

$$8) \quad \begin{array}{ccccccccccccc} 7 & & 3 & & 8 & & 3 & & 2 & & 7 & & 1 & & 10 & & 11 & & 2 \\ x & 8 & x & 10 & x & 2 & x & 9 & x & 12 & x & 7 & x & 9 & x & 1 & x & 5 & x & 2 \end{array}$$

$$9) \quad \begin{matrix} 7 & 1 & 10 & 2 & 8 & 9 & 2 & 6 & 5 & 9 \\ \times 12 & \times 2 & \times 8 & \times 9 & \times 11 & \times 9 & \times 9 & \times 2 & \times 2 & \times 5 \end{matrix}$$

$$10) \quad \begin{matrix} 7 & 1 & 9 & 12 & 2 & 2 & 1 & 3 & 3 & 1 \\ 1 & 4 & 12 & 11 & 10 & 4 & 10 & 2 & 2 & 6 \end{matrix}$$

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$$1) \quad \begin{array}{r} 9 \\ + 17 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 17 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 7 \\ \hline \end{array} \quad \begin{array}{r} 14 \\ + 9 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 1 \\ + 4 \\ \hline 13 \end{array} \quad \begin{array}{r} 3 \\ + 14 \\ \hline 14 \end{array} \quad \begin{array}{r} 14 \\ + 14 \\ \hline 0 \end{array} \quad \begin{array}{r} 10 \\ + 11 \\ \hline 11 \end{array} \quad \begin{array}{r} 2 \\ + 16 \\ \hline 10 \end{array} \quad \begin{array}{r} 12 \\ + 6 \\ \hline 14 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} & 9 & & 11 & & 6 & & 12 & & 7 & & 7 & & 9 & & 12 & & 8 & & 12 \\ & + 16 & & + 3 & & + 7 & & + 7 & & + 8 & & + 13 & & + 3 & & + 12 & & + 3 & & + 14 \end{array}$$

$$4) \quad \begin{array}{cccccccccccccc} 16 & & 11 & & 5 & & 7 & & 8 & & 5 & & 18 & & 8 & & 16 & & 1 \\ + 9 & & + 16 & & + 0 & & + 13 & & + 15 & & + 16 & & + 17 & & + 17 & & + 16 & & + 13 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccccccc} & 2 & & 2 & & 4 & & 13 & & 5 & & 12 & & 0 & & 16 & & 5 & & 14 \\ + & 16 & + & 6 & + & 0 & + & 11 & + & 0 & + & 9 & + & 11 & + & 2 & + & 18 & + & 4 \end{array}$$

$$6) \quad \begin{array}{ccccccccccccccccc} 9 & & 5 & & 7 & & 8 & & 9 & & 7 & & 15 & & 11 & & 1 & & 17 \\ + 5 & & + 4 & & + 9 & & + 5 & & + 14 & & + 2 & & + 17 & & + 1 & & + 9 & & + 11 \end{array}$$

$$7) \quad \begin{array}{ccccccccccccccccc} 1 & 13 & 16 & 6 & 8 & 3 & 11 & 2 & 2 & 3 \\ + 9 & + 8 & + 11 & + 3 & + 11 & + 15 & + 10 & + 5 & + 9 & + 17 \end{array}$$

$$8) \quad \begin{array}{ccccccccccccccccc} & 1 & & 8 & & 8 & & 11 & & 0 & & 11 & & 5 & & 0 & & 1 & & 7 \\ & + 10 & & + 5 & & + 11 & & + 12 & & + 16 & & + 9 & & + 18 & & + 6 & & + 11 & & + 1 \end{array}$$

$$9) \quad \begin{array}{ccccccccccccccccc} 1 & 2 & 17 & 1 & 2 & 10 & 6 & 7 & 12 & 9 & 18 \\ + 15 & + 8 & + 0 & + 2 & + 7 & + 18 & + 2 & + 5 & + 3 \\ \hline \end{array}$$

$$10) \quad \begin{array}{cccccccccccccc} 3 & 18 & 0 & 17 & 11 & 0 & 5 & 4 & 14 & 6 \\ + 8 & + 18 & + 13 & + 12 & + 15 & + 6 & + 5 & + 3 & + 3 & + 0 \end{array}$$

$$1) \quad \begin{array}{r} 9 \\ + 17 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ + 2 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 3 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ + 4 \\ \hline \end{array} \quad \begin{array}{r} 17 \\ + 1 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ + 7 \\ \hline \end{array} \quad \begin{array}{r} 14 \\ + 9 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 1 \\ + 4 \\ \hline 13 \end{array} \quad \begin{array}{r} 3 \\ + 14 \\ \hline 14 \end{array} \quad \begin{array}{r} 14 \\ + 14 \\ \hline 0 \end{array} \quad \begin{array}{r} 10 \\ + 11 \\ \hline 11 \end{array} \quad \begin{array}{r} 2 \\ + 16 \\ \hline 10 \end{array} \quad \begin{array}{r} 12 \\ + 6 \\ \hline 18 \end{array}$$

$$3) \quad \begin{array}{cccccccccccccc} & 9 & & 11 & & 6 & & 12 & & 7 & & 7 & & 9 & & 12 & & 8 & & 12 \\ & + 16 & & + 3 & & + 7 & & + 7 & & + 8 & & + 13 & & + 3 & & + 12 & & + 3 & & + 14 \end{array}$$

$$4) \quad \begin{array}{cccccccccccccc} 16 & & 11 & & 5 & & 7 & & 8 & & 5 & & 18 & & 8 & & 16 & & 1 \\ + 9 & & + 16 & & + 0 & & + 13 & & + 15 & & + 16 & & + 17 & & + 17 & & + 16 & & + 13 \end{array}$$

$$5) \quad \begin{array}{ccccccccccccc} 2 & 2 & 4 & 13 & 5 & 12 & 0 & 16 & 5 & 14 \\ + 16 & + 6 & + 0 & + 11 & + 0 & + 9 & + 11 & + 2 & + 18 & + 4 \end{array}$$

$$6) \quad \begin{matrix} 9 & 5 & 7 & 8 & 9 & 7 & 15 & 11 & 1 & 17 \\ + 5 & + 4 & + 9 & + 5 & + 14 & + 2 & + 17 & + 1 & + 9 & + 11 \end{matrix}$$

$$7) \quad \begin{array}{ccccccccccccccccc} 1 & & 13 & & 16 & & 6 & & 8 & & 3 & & 11 & & 2 & & 2 & & 3 \\ + 9 & & + 8 & & + 11 & & + 3 & & + 11 & & + 15 & & + 10 & & + 5 & & + 9 & & + 17 \end{array}$$

$$8) \quad \begin{array}{ccccccccccccc} 1 & 8 & 8 & 11 & 0 & 11 & 5 & 0 & 1 & 7 \\ + 10 & + 5 & + 11 & + 12 & + 16 & + 9 & + 18 & + 6 & + 11 & + 1 \end{array}$$

$$9) \quad \begin{array}{ccccccccccccc} 1 & 2 & 17 & 1 & 2 & 6 & 7 & 12 & 9 & 18 \\ + 15 & + 8 & + 0 & + 2 & + 10 & + 7 & + 18 & + 2 & + 5 & + 3 \end{array}$$

$$10) \quad \begin{matrix} 3 & 18 & 0 & 17 & 11 & 0 & 5 & 4 & 14 & 6 \\ 8 & 18 & 12 & 12 & 15 & 6 & 5 & 3 & 3 & 0 \end{matrix}$$

$$1) \quad -\frac{11}{2} \quad -\frac{16}{7} \quad -\frac{17}{12} \quad -\frac{3}{2} \quad -\frac{11}{6} \quad -\frac{2}{2} \quad -\frac{2}{2} \quad -\frac{13}{11} \quad -\frac{8}{2} \quad -\frac{4}{3}$$

$$2) \quad \begin{array}{cccccccccc} 8 & 16 & 17 & 13 & 18 & 4 & 16 & 10 & 17 & 5 \\ -4 & -11 & -9 & -12 & -8 & -1 & -2 & -2 & -9 & -1 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} 9 & 18 & 16 & 11 & 17 & 17 & 10 & 4 & 11 & 5 \\ -8 & -12 & -4 & -6 & -2 & -1 & -5 & -1 & -3 & -3 \end{array}$$

$$4) \quad \begin{matrix} 1 & 12 & 7 & 14 & 15 & 8 & 16 & 9 & 4 & 12 \\ -1 & -9 & -5 & -9 & -8 & -6 & -12 & -9 & -3 & -8 \end{matrix}$$

$$5) \quad \begin{array}{cccccccccccccc} 10 & 18 & 12 & 8 & 16 & 15 & 7 & 17 & 17 & 16 \\ -3 & -17 & -3 & -4 & -11 & -10 & -4 & -1 & -16 & -11 \end{array}$$

$$6) \quad \begin{array}{cccccccccccc} 15 & 14 & 1 & 9 & 10 & 10 & 4 & 2 & 14 & 9 \\ -15 & -12 & -1 & -6 & -1 & -8 & -2 & -1 & -7 & -8 \end{array}$$

$$7) \quad \begin{matrix} 18 & 14 & 17 & 5 & 14 & 3 & 10 & 4 & 4 & 8 \\ -15 & -12 & -16 & -4 & -13 & -1 & -7 & -1 & -1 & -4 \end{matrix}$$

$$8) \quad \begin{matrix} 14 & 10 & 2 & 1 & 11 & 2 & 1 & 7 & 10 & 12 \\ -12 & -5 & -1 & -1 & -4 & -1 & -1 & -3 & -8 & -1 \end{matrix}$$

$$9) \quad \begin{matrix} 3 & 8 & 14 & 18 & 16 & 5 & 8 & 16 & 4 & 18 \\ -1 & -2 & -7 & -6 & -1 & -1 & -4 & -3 & -2 & -4 \end{matrix}$$

$$10) \quad \begin{matrix} 5 & 4 & 2 & 18 & 14 & 9 & 11 & 16 & 7 & 8 \\ -2 & -2 & -1 & -3 & -3 & -1 & -5 & -14 & -7 & -1 \end{matrix}$$

$$1) \quad -\frac{11}{2} \quad -\frac{16}{7} \quad -\frac{17}{12} \quad -\frac{3}{2} \quad -\frac{11}{6} \quad -\frac{2}{2} \quad -\frac{2}{2} \quad -\frac{13}{11} \quad -\frac{8}{2} \quad -\frac{4}{3}$$

$$2) \quad \begin{array}{cccccccccc} 8 & 16 & 17 & 13 & 18 & 4 & 16 & 10 & 17 & 5 \\ -4 & -11 & -9 & -12 & -8 & -1 & -2 & -2 & -9 & -1 \end{array}$$

$$3) \quad \begin{array}{cccccccccccccc} 9 & 18 & 16 & 11 & 17 & 17 & 10 & 4 & 11 & 5 \\ -8 & -12 & -4 & -6 & -2 & -1 & -5 & -1 & -3 & -3 \end{array}$$

$$4) \quad \begin{matrix} 1 & 12 & 7 & 14 & 15 & 8 & 16 & 9 & 4 & 12 \\ -1 & -9 & -5 & -9 & -8 & -6 & -12 & -9 & -3 & -8 \end{matrix}$$

$$5) \quad \begin{array}{cccccccccccccc} 10 & 18 & 12 & 8 & 16 & 15 & 7 & 17 & 17 & 16 \\ -3 & -17 & -3 & -4 & -11 & -10 & -4 & -1 & -16 & -11 \end{array}$$

$$6) \quad \begin{array}{cccccccccccc} 15 & 14 & 1 & 9 & 10 & 10 & 4 & 2 & 14 & 9 \\ -15 & -12 & -1 & -6 & -1 & -8 & -2 & -1 & -7 & -8 \end{array}$$

$$7) \quad \begin{matrix} 18 & 14 & 17 & 5 & 14 & 3 & 10 & 4 & 4 & 8 \\ -15 & -12 & -16 & -4 & -13 & -1 & -7 & -1 & -1 & -4 \end{matrix}$$

$$8) \quad \begin{matrix} 14 & 10 & 2 & 1 & 11 & 2 & 1 & 7 & 10 & 12 \\ -12 & -5 & -1 & -1 & -4 & -1 & -1 & -3 & -8 & -1 \end{matrix}$$

$$9) \quad \begin{matrix} 3 & 8 & 14 & 18 & 16 & 5 & 8 & 16 & 4 & 18 \\ -1 & -2 & -7 & -6 & -1 & -1 & -4 & -3 & -2 & -4 \end{matrix}$$

$$10) \quad \begin{matrix} 5 & 4 & 2 & 18 & 14 & 9 & 11 & 16 & 7 & 8 \\ -2 & -2 & -1 & -3 & -3 & -1 & -5 & -14 & -7 & -1 \end{matrix}$$

$$1) \quad \begin{array}{cccccccccc} 5 & 8 & 8 & 9 & 3 & 2 & 8 & 11 & 10 & 12 \\ \times 11 & \times 1 & \times 10 & \times 5 & \times 5 & \times 9 & \times 3 & \times 5 & \times 2 & \times 8 \end{array}$$

$$2) \quad \begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array} \quad \begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 10 \\ \times 12 \\ \hline 120 \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline 60 \end{array} \quad \begin{array}{r} 9 \\ \times 6 \\ \hline 54 \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline 96 \end{array} \quad \begin{array}{r} 1 \\ \times 2 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ \times 8 \\ \hline 40 \end{array} \quad \begin{array}{r} 10 \\ \times 8 \\ \hline 80 \end{array} \quad \begin{array}{r} 1 \\ \times 5 \\ \hline 5 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} & 1 & & 8 & & 7 & & 2 & & 5 & & 4 & & 2 & & 6 & & 1 & & 3 \\ x & 10 & x & 12 & x & 3 & x & 1 & x & 10 & x & 10 & x & 4 & x & 4 & x & 9 & x & 8 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 5 & & 2 & & 4 & & 8 & & 8 & & 10 & & 5 & & 2 & & 8 & & 8 \\ x & 4 & x & 3 & x & 4 & x & 10 & x & 10 & x & 8 & x & 10 & x & 10 & x & 9 & x & 9 \end{array}$$

$$5) \quad \begin{matrix} 1 & 11 & 11 & 9 & 10 & 9 & 4 & 3 & 11 & 11 \\ x \ 4 & x \ 2 & x \ 2 & x \ 4 & x \ 10 & x \ 2 & x \ 8 & x \ 8 & x \ 8 & x \ 9 \end{matrix}$$

$$6) \quad \begin{array}{cccccccccccc} 11 & 12 & 8 & 12 & 9 & 6 & 8 & 10 & 3 & 8 \\ x 10 & x 4 & x 12 & x 4 & x 11 & x 11 & x 10 & x 8 & x 4 & x 11 \end{array}$$

$$7) \quad \begin{matrix} & 6 & & 11 & & 10 & & 7 & & 5 & & 5 & & 4 & & 1 & & 8 & & 2 \\ & \times & 8 & & \times & 7 & & \times & 11 & & \times & 7 & & \times & 9 & & \times & 2 & & \times & 12 & & \times & 11 & & \times & 8 & & \times & 10 \end{matrix}$$

$$8) \quad \begin{matrix} 6 & 11 & 6 & 11 & 7 & 9 & 12 & 1 & 11 & 1 \\ x & 12 & x & 7 & x & 5 & x & 2 & x & 3 & x & 1 & x & 3 & x & 6 & x & 8 & x & 4 \end{matrix}$$

$$9) \quad \begin{matrix} 7 & 6 & 5 & 12 & 9 & 5 & 12 & 7 & 12 & 5 & 6 \\ x^2 & x^{11} & x^9 & x^7 & x^7 & x^{11} & x^1 & x^3 & x^5 & x^7 \end{matrix}$$

10)      7            3            10            6            8            10            3            1            11            4  
       5            7            4            1            6            10            2            2            1            2

$$1) \quad \begin{array}{cccccccccc} & 5 & & 8 & & 8 & & 9 & & 3 & \\ & \times & 11 & & \times & 1 & & \times & 10 & \times & 5 \\ \hline & 55 & & 8 & & 80 & & 9 & & 3 & \end{array}$$

$$2) \quad \begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array} \quad \begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array} \quad \begin{array}{r} 10 \\ \times 12 \\ \hline 120 \end{array} \quad \begin{array}{r} 5 \\ \times 12 \\ \hline 60 \end{array} \quad \begin{array}{r} 9 \\ \times 6 \\ \hline 54 \end{array} \quad \begin{array}{r} 8 \\ \times 12 \\ \hline 96 \end{array} \quad \begin{array}{r} 1 \\ \times 2 \\ \hline 2 \end{array} \quad \begin{array}{r} 5 \\ \times 8 \\ \hline 40 \end{array} \quad \begin{array}{r} 10 \\ \times 8 \\ \hline 80 \end{array} \quad \begin{array}{r} 1 \\ \times 5 \\ \hline 5 \end{array}$$

$$3) \quad \begin{array}{ccccccccccccccccc} & 1 & & 8 & & 7 & & 2 & & 5 & & 4 & & 2 & & 6 & & 1 & & 3 \\ x & 10 & x & 12 & x & 3 & x & 1 & x & 10 & x & 10 & x & 4 & x & 4 & x & 9 & x & 8 \end{array}$$

$$4) \quad \begin{array}{ccccccccccccccccc} 5 & & 2 & & 4 & & 8 & & 8 & & 10 & & 5 & & 2 & & 8 & & 8 \\ x & 4 & x & 3 & x & 4 & x & 10 & x & 10 & x & 8 & x & 10 & x & 10 & x & 9 & x & 9 \end{array}$$

$$5) \quad \begin{matrix} 1 & 11 & 11 & 9 & 10 & 9 & 4 & 3 & 11 & 11 \\ x & 4 & x & 2 & x & 2 & x & 4 & x & 10 & x & 2 & x & 8 & x & 8 & x & 8 & x & 9 \end{matrix}$$

$$6) \quad \begin{array}{cccccccccccc} 11 & 12 & 8 & 12 & 9 & 6 & 8 & 10 & 3 & 8 \\ x 10 & x 4 & x 12 & x 4 & x 11 & x 11 & x 10 & x 8 & x 4 & x 11 \end{array}$$

$$7) \quad \begin{matrix} & 6 & & 11 & & 10 & & 7 & & 5 & & 5 & & 4 & & 1 & & 8 & & 2 \\ & \times & 8 & & \times & 7 & & \times & 11 & & \times & 7 & & \times & 9 & & \times & 2 & & \times & 12 & & \times & 11 & & \times & 8 & & \times & 10 \end{matrix}$$

$$8) \quad \begin{matrix} 6 & 11 & 6 & 11 & 7 & 9 & 12 & 1 & 11 & 1 \\ x & 12 & x & 7 & x & 5 & x & 2 & x & 3 & x & 1 & x & 3 & x & 6 & x & 8 & x & 4 \end{matrix}$$

$$9) \quad \begin{matrix} 7 & 6 & 5 & 12 & 9 & 5 & 12 & 7 & 12 & 5 & 6 \\ x^2 & x^{11} & x^9 & x^7 & x^7 & x^{11} & x^1 & x^3 & x^5 & x^7 \end{matrix}$$

10)      7            3            10            6            8            10            3            1            11            4  
       5            7            4            1            6            10            2            2            1            2

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$$4 \overline{)48}$$

$$12 \overline{)120}$$

$$2 \overline{)18}$$

$$3 \overline{)27}$$

$$12 \overline{)84}$$

$$9 \overline{)18}$$

$$10 \overline{)60}$$

$$6 \overline{)72}$$

13)

$$5 \overline{)20}$$

$$2 \overline{)8}$$

$$2 \overline{)4}$$

$$4 \overline{)36}$$

## WORKSHEET 1

1)	9	90	7	108	10	18	40	110	36	99
2)	7	48	96	63	36	132	36	36	32	45
3)	108	90	144	100	27	45	22	132	144	18
4)	55	50	30	120	12	50	32	32	77	70
5)	40	45	132	99	32	24	3	32	56	48
6)	40	12	55	8	10	40	80	63	99	48
7)	77	44	60	40	21	60	10	66	56	12
8)	20	24	16	22	30	54	30	18	10	110
9)	12	16	132	10	108	81	14	27	110	6
10)	63	30	6	55	24	77	33	120	44	84

## WORKSHEET 2

1)	10	3	4	10	3	3	10	6
2)	1	7	3	12	3	5	10	1
3)	11	7	2	4	6	9	7	1
4)	5	4	10	3	6	5	2	11
5)	11	3	3	11	11	9	11	1
6)	1	9	10	3	6	12	6	6
7)	3	1	6	7	11	2	7	6
8)	2	12	12	2	8	12	3	9
9)	12	10	3	11	2	9	1	9
10)	6	11	11	9	1	10	5	10
11)	11	2	10	7	6	10	10	9
12)	9	10	7	7	3	11	10	10
13)	3	12	6	8				

## WORKSHEET 3

1)	22	16	33	11	19	14	7	4	28	28
2)	6	17	8	18	15	14	18	5	5	3
3)	21	19	16	25	17	9	16	15	28	27
4)	26	23	18	10	13	10	24	22	3	19
5)	30	21	14	25	19	27	23	4	21	20
6)	7	6	18	25	24	20	6	15	29	10
7)	30	14	30	24	27	26	17	25	21	12
8)	20	14	26	1	12	6	23	17	11	16
9)	24	15	20	5	30	11	15	24	20	17
10)	8	23	29	21	6	10	33	17	24	10

## WORKSHEET 4

1)	0	4	1	0	11	7	1	4	6	13
2)	0	10	8	5	2	2	0	0	3	2
3)	4	10	1	0	6	10	1	0	1	9
4)	6	0	6	3	7	0	4	0	4	1
5)	10	11	3	4	4	2	7	1	1	1
6)	7	12	7	5	3	9	13	5	4	6
7)	3	0	2	1	3	0	0	0	0	0
8)	7	3	2	0	9	0	11	7	0	3
9)	11	3	1	9	5	3	0	10	3	0
10)	4	1	1	9	3	2	7	2	0	14

## WORKSHEET 5

1)	36	40	66	72	60	18	21	80	108	48
2)	45	21	10	8	30	60	9	3	9	22
3)	16	60	99	12	16	30	15	72	80	121
4)	8	66	49	108	24	42	48	8	132	12
5)	20	12	24	70	16	42	22	18	88	32
6)	22	16	12	2	9	7	12	49	54	6
7)	50	9	18	70	84	30	72	24	16	8
8)	1	18	18	72	20	55	55	16	28	44
9)	108	4	27	80	66	2	4	108	2	22
10)	12	45	14	70	70	18	33	36	48	14

## WORKSHEET 6

1)	7	11	2	11	1	5	4	11
2)	1	3	9	9	5	7	10	7
3)	5	7	7	8	1	8	11	11
4)	12	3	3	6	11	8	10	12
5)	2	4	1	2	9	7	7	12
6)	5	11	12	5	10	1	12	2
7)	6	8	6	2	8	2	5	5
8)	6	7	11	2	7	11	4	5
9)	12	4	4	5	3	6	12	11
10)	9	1	5	6	10	12	6	11
11)	4	8	11	6	8	1	12	12
12)	9	9	1	10	2	2	10	9
13)	12	8	5	4				

## WORKSHEET 7

1)	56	88	20	96	30	35	10	12	14	32
2)	22	44	30	12	100	60	21	110	12	77
3)	3	48	16	4	10	80	72	16	36	36
4)	18	77	10	24	24	4	70	120	25	66
5)	6	48	72	132	48	8	30	48	84	54
6)	9	27	12	80	10	60	20	121	15	8
7)	15	40	14	7	132	12	7	6	70	15
8)	56	30	16	27	24	49	9	10	55	4
9)	84	2	80	18	88	81	18	12	10	45
10)	7	4	108	132	20	8	10	24	6	6

## WORKSHEET 8

1)	1	6	3	2	11	1	9	2
2)	12	7	4	1	6	1	3	12
3)	11	7	7	4	12	11	10	10
4)	7	3	5	11	1	10	4	7
5)	7	4	12	3	5	8	5	12
6)	5	12	9	1	7	5	5	5
7)	2	8	9	12	3	3	1	7
8)	9	8	2	11	8	9	6	12
9)	12	2	7	2	12	5	5	11
10)	12	4	4	2	6	8	4	6
11)	6	3	9	8	6	6	11	5
12)	5	8	5	1	2	5	8	7
13)	3	10	7	11				

WORKSHEET 9

1)	26	7	12	13	11	16	18	10	23	7
2)	5	16	17	28	10	21	18	22	7	16
3)	25	14	13	19	15	20	12	24	11	26
4)	25	27	5	20	23	21	35	25	32	14
5)	18	8	4	24	5	21	11	18	23	18
6)	14	9	16	13	23	9	32	12	10	28
7)	10	21	27	9	19	18	21	7	11	20
8)	11	13	19	23	16	20	23	6	12	8
9)	16	10	17	3	12	13	25	14	14	21
10)	11	36	13	29	26	6	10	7	17	6

WORKSHEET 10

1)	9	9	5	1	5	0	0	2	6	1
2)	4	5	8	1	10	3	14	8	8	4
3)	1	6	12	5	15	16	5	3	8	2
4)	0	3	2	5	7	2	4	0	1	4
5)	7	1	9	4	5	5	3	16	1	5
6)	0	2	0	3	9	2	2	1	7	1
7)	3	2	1	1	1	2	3	3	3	4
8)	2	5	1	0	7	1	0	4	2	11
9)	2	6	7	12	15	4	4	13	2	14
10)	3	2	1	15	11	8	6	2	0	7

WORKSHEET 11

1)	55	8	80	45	15	18	24	55	20	96
2)	100	8	120	60	54	96	2	40	80	5
3)	10	96	21	2	50	40	8	24	9	24
4)	20	6	16	80	80	80	50	20	72	72
5)	4	22	22	36	100	18	32	24	88	99
6)	110	48	96	48	99	66	80	80	12	88
7)	48	77	110	49	45	10	48	11	64	20
8)	72	77	30	22	21	9	36	6	88	4
9)	21	66	45	84	63	55	12	21	60	42
10)	35	21	40	24	48	100	6	8	11	8

WORKSHEET 12

1)	11	3	10	8	5	7	7	3		
2)	6	11	12	4	11	3	12	2		
3)	9	10	10	5	8	5	1	8		
4)	7	2	1	8	8	3	6	6		
5)	8	11	8	6	3	5	5	1		
6)	10	4	5	6	2	4	4	8		
7)	5	12	3	12	11	9	12	12		
8)	3	11	8	2	6	10	12	4		
9)	11	5	1	11	5	6	6	9		
10)	9	8	1	4	7	3	10	11		
11)	8	9	1	3	7	3	1	7		
12)	12	10	9	9	7	2	6	12		
13)	4	4	2	9						

