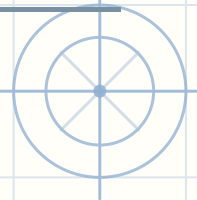


## Taking out a common factor — Two and three terms

Name: \_\_\_\_\_

Date: \_\_\_\_\_



( Take out the greatest common factor. Fill in every number.

1  $68x^2 + 136x + 85 = \_\_\_ (\_\_\_x^2 + \_\_\_x + \_\_\_)$

2  $28x^2 + 77x + 14 = \_\_\_ (\_\_\_x^2 + \_\_\_x + \_\_\_)$

3  $105x + 75 = \_\_\_ (\_\_\_x + \_\_\_)$

4  $120x^2 + 216x + 216 = \_\_\_ (\_\_\_x^2 + \_\_\_x + \_\_\_)$

5  $126x + 140 = \_\_\_ (\_\_\_x + \_\_\_)$

6  $42x + 154 = \_\_\_ (\_\_\_x + \_\_\_)$

7  $10x + 45 = \_\_\_ (\_\_\_x + \_\_\_)$

8  $8x^2 + 40x + 4 = \_\_\_ (\_\_\_x^2 + \_\_\_x + \_\_\_)$

9  $132x + 48 = \_\_\_ (\_\_\_x + \_\_\_)$

10  $57x^2 + 133x + 19 = \_\_\_ (\_\_\_x^2 + \_\_\_x + \_\_\_)$



## Taking out a common factor · Two and three terms — Answer key

1.  $68x^2 + 136x + 85 =$   
 $17(4x^2 + 8x + 5)$  ( $68 \div 17 =$   
 $4, 136 \div 17 = 8, 85 \div 17 =$   
 $5$ )

5.  $126x + 140 = 14(9x + 10)$   
( $126 \div 14 = 9, 140 \div 14 =$   
 $10$ )

9.  $132x + 48 = 12(11x + 4)$   
( $132 \div 12 = 11, 48 \div 12 = 4$ )

2.  $28x^2 + 77x + 14 = 7(4x^2 +$   
 $11x + 2)$  ( $28 \div 7 = 4, 77 \div 7$   
 $= 11, 14 \div 7 = 2$ )

6.  $42x + 154 = 14(3x + 11)$   
( $42 \div 14 = 3, 154 \div 14 = 11$ )

10.  $57x^2 + 133x + 19 =$   
 $19(3x^2 + 7x + 1)$  ( $57 \div 19 =$   
 $3, 133 \div 19 = 7, 19 \div 19 =$   
 $1$ )

3.  $105x + 75 = 15(7x + 5)$   
( $105 \div 15 = 7, 75 \div 15 = 5$ )

7.  $10x + 45 = 5(2x + 9)$  ( $10$   
 $\div 5 = 2, 45 \div 5 = 9$ )

4.  $120x^2 + 216x + 216 =$   
 $24(5x^2 + 9x + 9)$  ( $120 \div 24$   
 $= 5, 216 \div 24 = 9, 216 \div 24$   
 $= 9$ )

8.  $8x^2 + 40x + 4 = 4(2x^2 +$   
 $10x + 1)$  ( $8 \div 4 = 2, 40 \div 4 =$   
 $10, 4 \div 4 = 1$ )