



Math worksheet on 'Factoring - Simplifying Multiplication with Factors - Composite to Bracketed Factors (Level 2)'. Part of a broader unit on 'Factoring, Multiplication, Division, Fractions - Intro'

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1 Simplify this multiplication to bracketed factors

$$63 \times 98$$

$$a) 9 \times 6 \times 7 \times (2 \times 14 \times 7)$$

$$b) 6 \times 3 \times 7 \times (2 \times 10 \times 7)$$

$$c) 6 \times 6 \times 7 \times (2 \times 14 \times 7)$$

$$d) 9 \times 9 \times 4 \times (6 \times 14 \times 7)$$

$$e) 3 \times 3 \times 7 \times (2 \times 7 \times 7)$$

$$f) 9 \times 6 \times 4 \times (2 \times 14 \times 7)$$

2 Simplify this multiplication to bracketed factors

$$28 \times 42$$

$$a) 6 \times 2 \times 10 \times (2 \times 5 \times 4)$$

$$b) 6 \times 2 \times 7 \times (2 \times 3 \times 3)$$

$$c) 4 \times 2 \times 10 \times (2 \times 5 \times 4)$$

$$d) 2 \times 2 \times 7 \times (2 \times 3 \times 7)$$

$$e) 6 \times 2 \times 7 \times (2 \times 3 \times 4)$$

$$f) 4 \times 2 \times 10 \times (2 \times 5 \times 7)$$

3 Simplify this multiplication to bracketed factors

$$70 \times 70$$

$$a) 4 \times 5 \times 6 \times (3 \times 9 \times 7)$$

$$b) 5 \times 5 \times 6 \times (3 \times 8 \times 7)$$

$$c) 2 \times 5 \times 7 \times (2 \times 5 \times 7)$$

$$d) 6 \times 5 \times 6 \times (3 \times 9 \times 7)$$

$$e) 2 \times 5 \times 6 \times (3 \times 5 \times 7)$$

$$f) 5 \times 5 \times 6 \times (3 \times 5 \times 7)$$

4 Simplify this multiplication to bracketed factors

$$6 \times 100$$

$$a) 1 \times 6 \times (2 \times 1 \times 5 \times 5)$$

$$b) 3 \times 6 \times (4 \times 1 \times 1 \times 5)$$

$$c) 3 \times 6 \times (2 \times 1 \times 1 \times 5)$$

$$d) 2 \times 3 \times (2 \times 2 \times 5 \times 5)$$

$$e) 1 \times 6 \times (2 \times 2 \times 5 \times 5)$$

$$f) 1 \times 3 \times (2 \times 2 \times 5 \times 5)$$

5 Simplify this multiplication to bracketed factors

$$63 \times 30$$

$$a) 3 \times 3 \times 7 \times (2 \times 3 \times 5)$$

$$b) 3 \times 2 \times 10 \times (2 \times 3 \times 6)$$

$$c) 3 \times 5 \times 10 \times (2 \times 6 \times 6)$$

$$d) 7 \times 5 \times 10 \times (1 \times 6 \times 6)$$

$$e) 3 \times 3 \times 10 \times (2 \times 3 \times 5)$$

$$f) 3 \times 2 \times 10 \times (2 \times 7 \times 6)$$

6 Simplify this multiplication to bracketed factors

$$6 \times 24$$

$$a) 1 \times 3 \times (2 \times 2 \times 2 \times 3)$$

$$b) 2 \times 3 \times (3 \times 2 \times 2 \times 3)$$

$$c) 2 \times 3 \times (2 \times 2 \times 2 \times 2)$$

$$d) 1 \times 3 \times (2 \times 2 \times 2 \times 2)$$

$$e) 2 \times 3 \times (1 \times 2 \times 2 \times 3)$$

$$f) 2 \times 3 \times (2 \times 2 \times 2 \times 3)$$

7 Simplify this multiplication to bracketed factors

$$20 \times 12$$

$$a) 6 \times 1 \times 1 \times (6 \times 5 \times 3)$$

$$b) 6 \times 1 \times 1 \times (6 \times 5 \times 1)$$

$$c) 2 \times 6 \times 5 \times (2 \times 5 \times 3)$$

$$d) 2 \times 1 \times 1 \times (6 \times 5 \times 3)$$

$$e) 2 \times 6 \times 1 \times (2 \times 5 \times 3)$$

$$f) 2 \times 2 \times 5 \times (2 \times 2 \times 3)$$