Answer key

The method: Proportions

Cross multiply, then divide: 3/4 = x/20 gives 4x = 60, so x = 15.

$\frac{x}{3} = \frac{16}{6}$ $x = 8$

$x \times 6 = 3 \times 16$ cross multiply

$6x = 48$

$x = 8$ divide both sides by 6

$\frac{12}{x} = \frac{2}{7}$ $x = 42$

$12 \times 7 = x \times 2$ cross multiply

$84 = 2x$

$x = 42$ divide both sides by 2

Problems 1 and 2 worked out · Version 0A

$\frac{21}{x} = \frac{7}{3}$ $x = 9$

$21 \times 3 = x \times 7$ cross multiply

$63 = 7x$

$x = 9$ divide both sides by 7

$\frac{18}{x} = \frac{9}{4}$ $x = 8$

$18 \times 4 = x \times 9$ cross multiply

$72 = 9x$

$x = 8$ divide both sides by 9

Proportions · Version 0A

1) x = 9 2) x = 8 3) x = 1 4) x = 6 5) x = 40
6) x = 3 7) x = 7 8) x = 1 9) x = 16 10) x = 28
11) x = 3 12) x = 6 13) x = 12 14) x = 6
15) x = 1 16) x = 1 17) x = 7 18) x = 20
19) x = 35 20) x = 22 21) x = 28 22) x = 8
23) x = 6 24) x = 12 25) x = 54 26) x = 4
27) x = 4 28) x = 49 29) x = 77 30) x = 24
31) x = 6 32) x = 30 33) x = 28 34) x = 15
35) x = 28 36) x = 15