

# Homework

p. 329: 3, 6, 11, 15, 17, 19, 20

**3** Solve each proportion for  $x$ .

**a**  $\frac{3}{x} = \frac{12}{16}$

**b**  $\frac{x}{18} = \frac{3}{7}$

**c**  $\frac{7}{x-4} = \frac{3}{5}$

**6** Find the ratio of  $x$  to  $y$  if

**a**  $2x = 3y$

**b**  $6(y + 3) = 2(x + 9)$

**c**  $\frac{3}{x+5} = \frac{9}{y+15}$

**11** Find the geometric mean(s) between each pair of extremes.

**a** 4 and 25

**b** 3 and 5

**c**  $a$  and  $b$

**15** If 4 is a mean proportional between 6 and a number, what is the number?

**17** The ratio of the measure of the supplement of an angle to the measure of the complement of the angle is 5:2. Find the measure of the supplement.

**19** If  $x(a + b) = y(c + d)$ , find the ratio of  $x$  to  $y$ .

**20** If  $ex - fy = gx + hy$ , find the ratio of  $x$  to  $y$ .