

Solve each proportion. Leave your answer as a fraction in simplest form.

1) $\frac{6}{2} = \frac{4}{p}$

2) $\frac{4}{k} = \frac{8}{2}$

3) $\frac{n}{4} = \frac{8}{7}$

4) $\frac{5}{3} = \frac{x}{4}$

5) $\frac{7}{6} = \frac{5}{x}$

6) $\frac{7}{4} = \frac{r}{5}$

7) $\frac{6}{5} = \frac{2}{5n}$

8) $\frac{20}{32} = \frac{m+3}{8}$

9) $\frac{9}{4} = \frac{r-10}{r}$

10) $\frac{x+6}{x} = \frac{10}{7}$

Solve each proportion. Round each answer to the nearest hundredth.

$$11) \frac{3.4}{x} = \frac{2.17}{7.7}$$

$$12) \frac{8}{3} = \frac{v-9}{7v+4}$$

$$13) \frac{9}{8} = \frac{k+6}{6}$$

$$14) \frac{2}{10} = \frac{4}{a-3}$$

$$15) \frac{10}{p+2} = \frac{4}{3}$$

$$16) \frac{4}{6} = \frac{8}{x-1}$$

$$17) \frac{m}{8} = \frac{m+7}{9}$$

$$18) \frac{n}{n+1} = \frac{3}{5}$$

$$18) \frac{-5}{2x} = \frac{-8}{3x-24}$$

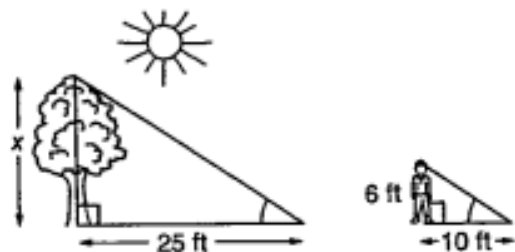
$$19) \frac{z+3}{4} = \frac{z-4}{6}$$

$$20) \frac{8}{5x-4} = \frac{6}{x+5}$$

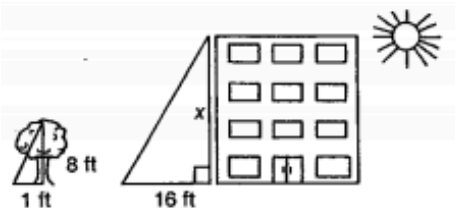
Indirect Measurement:

Write a proportion to find each missing measure of x . Then find x .

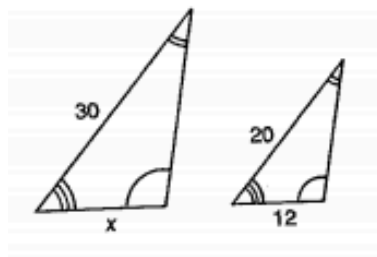
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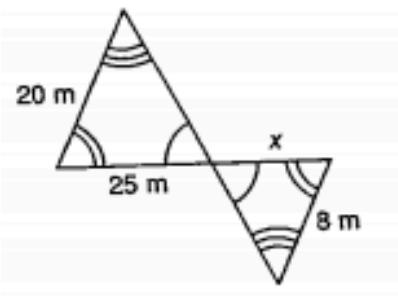
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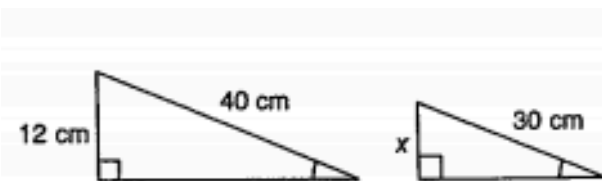
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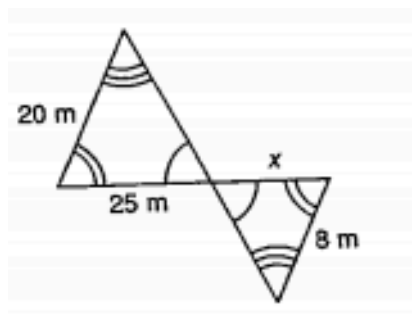
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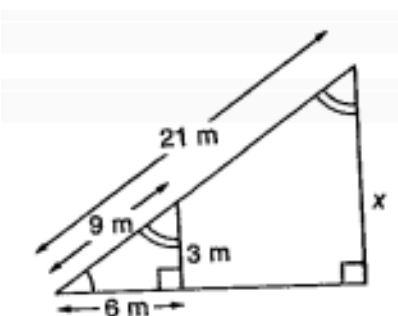
19.



20.



21.



Write a proportion for each scenario below. Then solve.

22. The ratio of the number of bones in the human skull to the number of bones in the ears is 11:3. There are 22 bones in the skull. How many bones are in the ears?

23. The ratio of acid to water in a mixture is 3 to 7. The mixture contains 42 mL of acid. How much water does the mixture contain?

24. A worker can complete the assembly of 15 tape players in 6 hours. At this rate, how many can the worker complete in a 40-hour work week?

25. A doctor sees each of her patients for 25 minutes during a typical appointment. How many patients can she see in a typical $7\frac{1}{2}$ hour day?

26. In the year 2000, there were 8.7 deaths per 1000 residents in the United States. If there were 281,421,906 residents in the U.S. during 2000, how many people died that year?

27. In a shipment of 400 parts, 14 are found to be defective. How many defective parts should be expected in a shipment of 1000?

28. Sirloin steak costs \$2.99 per pound. How much will 3.4 pounds cost?

29. A yard of fabric costs \$12.99. How much will 2 feet cost?

30. If a trip between work and home takes 15 minutes each way, how much time will be spent in a 5-day work-week traveling back and forth to work?

(Assume that at no point does the employee have to go home and come back within the same day.)

31. The ratio of men to women at a class is 6 to 5. How many students are in the class if there are 3600 men?