


$$19. \quad 0.01$$

Decimal Place - 2 times left


$$109. \quad 0.1$$

1 space left


$$\frac{1}{3} = 33\frac{1}{3}$$

$$\frac{1}{8} = 12\frac{1}{2} \%$$

$$\frac{1}{6} = 16\frac{2}{3} \%$$

$$\frac{2}{3} = 66\frac{2}{3}$$

$$\frac{3}{8} = 37\frac{1}{2}$$

$$\frac{5}{8} = 62.5 \%$$

$$11.) \frac{34.4 \text{ mi.}}{1 \text{ gal.}} = \frac{\text{ft.}}{\text{qt.}}$$

$$\frac{5280 \text{ ft.}}{1 \text{ mi.}} \times \frac{1 \text{ mi.}}{5280 \text{ ft.}} \times \frac{4 \text{ qt.}}{1 \text{ gal.}} \times \frac{1 \text{ gal.}}{4 \text{ qt.}} = \frac{34.4 \text{ mi.}}{1 \text{ gal.}} \times \frac{5280 \text{ ft.}}{1 \text{ mi.}} \times \frac{1 \text{ gal.}}{4 \text{ qt.}} = \frac{181632}{4} = \frac{45408 \text{ ft.}}{1 \text{ qt.}}$$

$$12.) \frac{48 \text{ oz.}}{1 \text{ day}} = \frac{\quad \text{gal}}{\text{yr.}}$$

$$\frac{\cancel{8 \text{ oz.}}}{\cancel{1 \text{ c}}} \cdot \frac{1 \text{ c}}{8 \text{ oz.}} \cdot \frac{\cancel{2 \text{ c.}}}{\cancel{1 \text{ pt.}}} \cdot \frac{1 \text{ pt.}}{2 \text{ c.}} \cdot \frac{\cancel{2 \text{ pt.}}}{\cancel{1 \text{ qt.}}} \cdot \frac{1 \text{ qt.}}{2 \text{ pt.}} \cdot \frac{\cancel{4 \text{ qt.}}}{\cancel{1 \text{ gal}}} \cdot \frac{1 \text{ gal}}{4 \text{ qt.}}$$

$$\frac{365 \text{ days}}{1 \text{ yr.}} \cdot \frac{1 \text{ yr.}}{365 \text{ days}}$$

$$\frac{48 \cancel{\text{ oz.}}}{1 \text{ day}} \times \frac{\cancel{1 \text{ c.}}}{\cancel{8 \text{ oz.}}} \times \frac{\cancel{1 \text{ pt.}}}{\cancel{2 \text{ c.}}} \times \frac{\cancel{1 \text{ qt.}}}{\cancel{2 \text{ pt.}}} \times \frac{1 \text{ gal}}{4 \text{ qt.}} \times \frac{365 \text{ days}}{\cancel{1 \text{ yr.}}} = \frac{17520}{128}$$

$$\frac{136.5 \text{ gal}}{1 \text{ year}}$$

$\frac{1}{5}$	$\frac{2}{10}$	$\frac{4}{20}$	$\frac{6}{30}$	$\frac{8}{40}$	$= \frac{1}{5}$ yes
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(Note: In the original image, the fraction 1/5 is circled in green. Red diagonal lines cross out the other fractions. Red numbers above the fractions indicate their values: 40, 20, 20, 20, 20.)

8.) 90% of 2000 = 1800

10% = 200

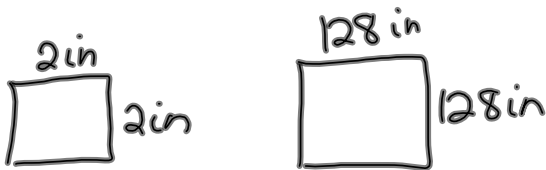
$$\begin{array}{r} 200 \\ \times 9 \\ \hline 1800 \end{array}$$

$3 \overline{) 48}$

11.) $66\frac{2}{3}\%$ of 48

$\frac{2}{3}$ of 48 = 32

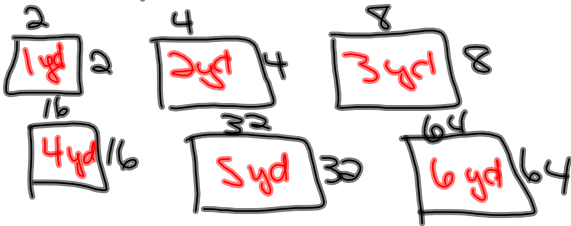
18.)

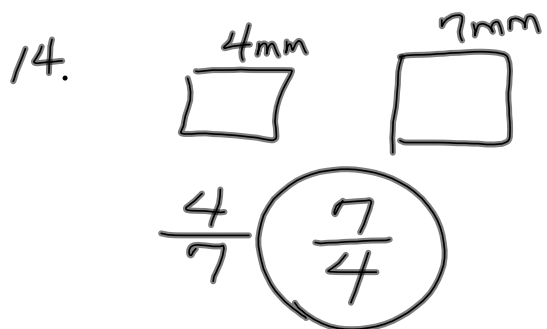


$$\frac{2 \text{ in}}{128 \text{ in}} = \frac{1}{64 \text{ in.}}$$

64 in. SF

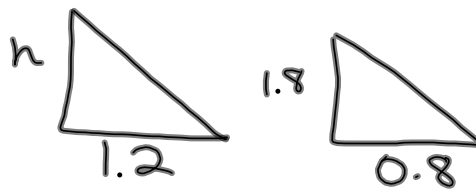
6 yds





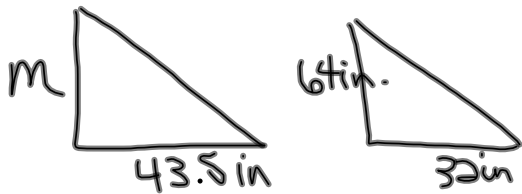
6-9 Indirect Measurement

$$\frac{2.7\text{m}}{1.2\text{m}} = \frac{h}{0.8\text{m}}$$



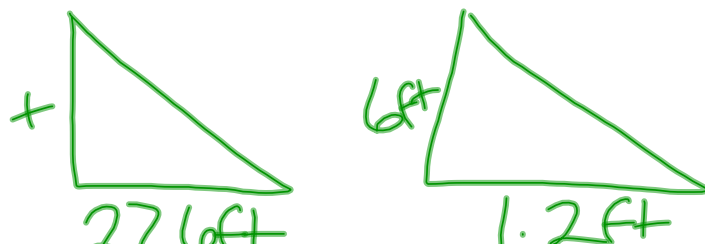
Shadow reckoning

- Similar triangles
- equal proportions (ratio)



$$\frac{87\text{in}}{m} = \frac{64}{32}$$

$$\frac{87\text{in}}{1} \times \frac{1\text{ft}}{12\text{in}} = \frac{87}{12} = 7\frac{1}{4}\text{ft.}$$



Two similar right triangles are shown. The first triangle has a vertical leg of 6ft and a horizontal leg of 27.6ft. The second triangle has a vertical leg of 6ft and a horizontal leg of 1.2ft.

$$\frac{6\text{ft}}{27.6\text{ft}} = \frac{6\text{ft}}{1.2\text{ft}} = t = 138\text{ft}$$

