

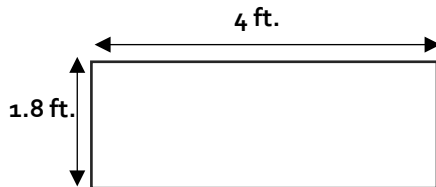
CALCULATING AREA



QUESTIONS

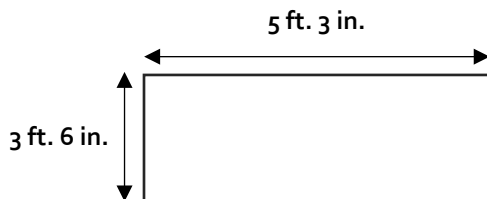
In the Workplace: Calculations of area are often used to determine amounts of material required to cover the surface of various shapes. Accurate calculations save time and money.

Calculate the area of each of the shapes below. Remember to show the units in your answer (cm^2 , m^2 , etc.).



$$A = 1.8 \text{ ft.} \times 4 \text{ ft.}$$

$$A = 7.2 \text{ ft.}^2$$

**ANSWER OPTION 1**

$$A = 3 \text{ ft. } 6 \text{ in.} \times 5 \text{ ft. } 3 \text{ in.}$$

$$A = 42 \text{ in.} \times 63 \text{ in.}$$

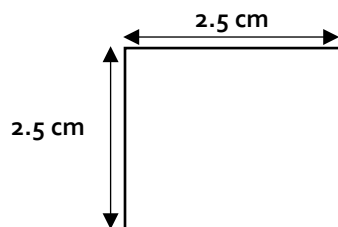
$$A = 2,646 \text{ in.}^2$$

ANSWER OPTION 2

$$A = 3 \text{ ft. } 6 \text{ in.} \times 5 \text{ ft. } 3 \text{ in.}$$

$$A = 3.5 \text{ ft.} \times 5.25 \text{ ft.}$$

$$A = 18.375 \text{ ft.}^2$$



$$A = 2.5 \text{ cm} \times 2.5 \text{ cm}$$

$$A = 6.25 \text{ cm}^2$$

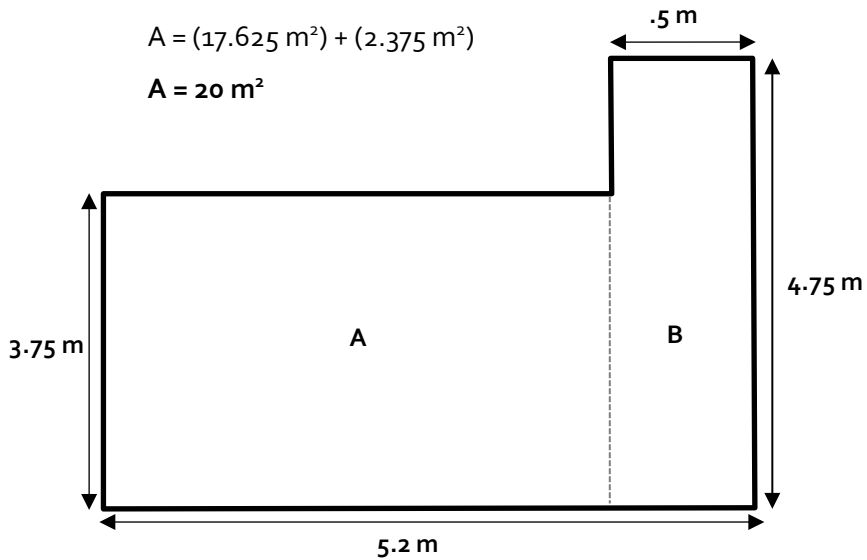
ANSWER OPTION 1

$$A = \text{Area A} + \text{Area B}$$

$$A = (4.7 \text{ m} \times 3.75 \text{ m}) + (4.75 \text{ m} \times .5 \text{ m})$$

$$A = (17.625 \text{ m}^2) + (2.375 \text{ m}^2)$$

$$A = 20 \text{ m}^2$$

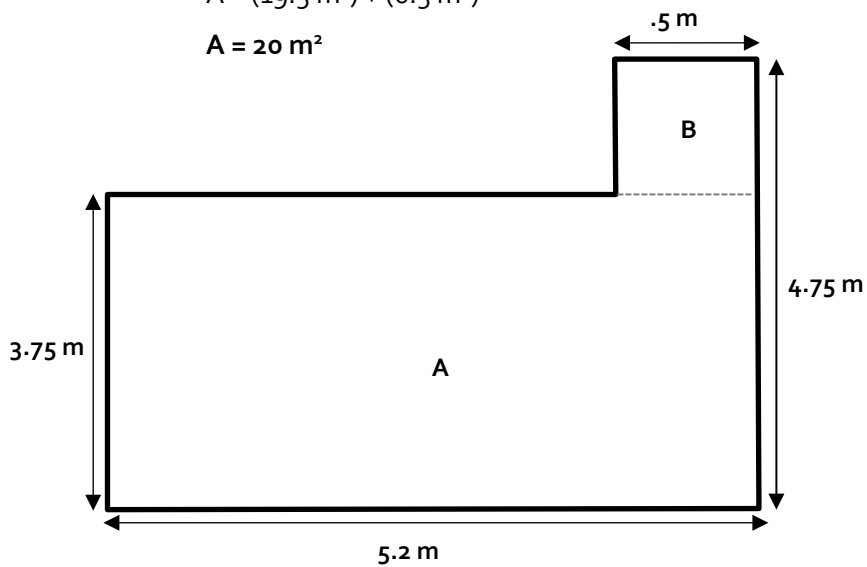
**ANSWER OPTION 2**

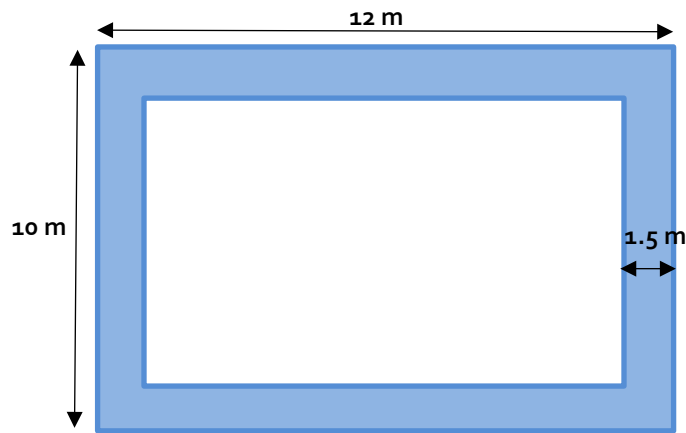
$$A = \text{Area A} + \text{Area B}$$

$$A = (5.2 \text{ m} \times 3.75 \text{ m}) + (1 \text{ m} \times .5 \text{ m})$$

$$A = (19.5 \text{ m}^2) + (0.5 \text{ m}^2)$$

$$A = 20 \text{ m}^2$$





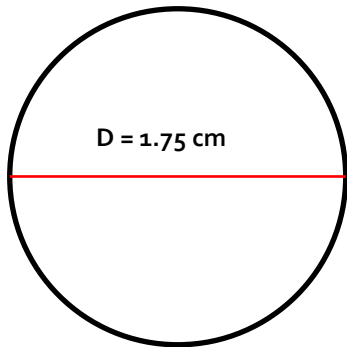
Area of the pathway

A = area of whole shape – area of middle shape

$$A = (12 \text{ m} \times 10 \text{ m}) + (9 \text{ m} \times 7 \text{ m})$$

$$A = (120 \text{ m}^2) + (63 \text{ m}^2)$$

$$A = 57 \text{ m}^2$$



$$A = \pi r^2$$

$$r = .875 \text{ cm}$$

$$A = \pi (.875 \text{ cm} \times .875 \text{ cm})$$

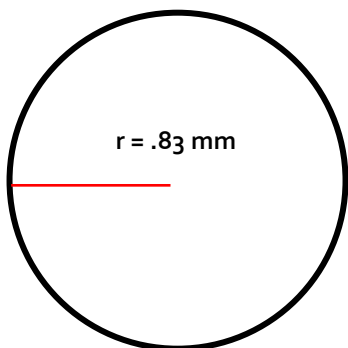
$$A = 2.405 \text{ cm}^2$$

$$A = \pi r^2$$

$$r = .875 \text{ cm}$$

$$A = 3.14 (.875 \text{ cm} \times .875 \text{ cm})$$

$$A = 2.404 \text{ cm}^2$$



$$A = \pi r^2$$

$$r = .83 \text{ mm}$$

$$A = \pi (.83 \text{ mm} \times .83 \text{ mm})$$

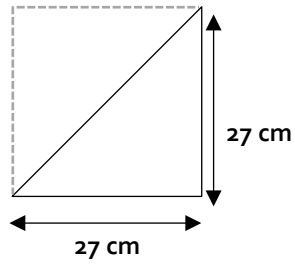
$$A = 2.164 \text{ mm}^2$$

$$A = \pi r^2$$

$$r = .83 \text{ mm}$$

$$A = 3.14 (.83 \text{ mm} \times .83 \text{ mm})$$

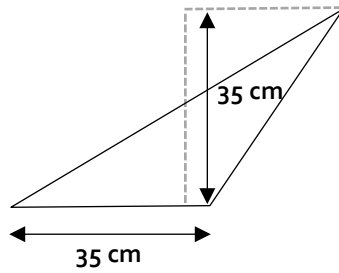
$$A = 2.163 \text{ mm}^2$$



$$A = B \times H \div 2$$

$$A = (27 \text{ cm} \times 27 \text{ cm}) \div 2$$

$$A = 364.5 \text{ cm}^2$$



$$A = B \times H \div 2$$

$$A = (35 \text{ cm} \times 35 \text{ cm}) \div 2$$

$$A = 612.5 \text{ cm}^2$$

CONVERSION



QUESTIONS

In the Workplace: Being able to use conversion effectively is a useful workplace skill.

NOTE: All resulting decimal values are carried through in full and rounded in the last step of the equation.

<p>Convert 35,000 km to mi. Round to the nearest whole number.</p> $35,000 \text{ km} = 21,739 \text{ mi.}$ $\frac{? \text{ mi}}{35,000 \text{ km}} = \frac{1 \text{ mi}}{1.61 \text{ km}}$ $\frac{(? \text{ mi} \times 35,000 \text{ km})}{35,000 \text{ km}} = \frac{(1 \text{ mi} \times 35,000 \text{ km})}{1.61 \text{ km}}$ $? \text{ mi} = \frac{(1 \text{ mi} \times 35,000 \text{ km})}{1.61 \text{ km}}$ $? \text{ mi} = \frac{35,000 \text{ mi}}{1.61}$ $? \text{ mi} = 21,739.130 (\dots) \text{ mi}$ $? \text{ mi} = 21,739 \text{ mi}$	<p>Convert 537 mi. to km Round to the nearest tenth.</p> $537 \text{ mi} = 864.6 \text{ km}$ $\frac{? \text{ km}}{537 \text{ km}} = \frac{1.61 \text{ km}}{1 \text{ mi}}$ $\frac{(? \text{ km} \times 537 \text{ mi})}{537 \text{ mi}} = \frac{(1.61 \text{ km} \times 537 \text{ mi})}{1 \text{ mi}}$ $? \text{ km} = \frac{(1.61 \text{ km} \times 537 \text{ mi})}{1 \text{ mi}}$ $? \text{ km} = \frac{864.57 \text{ km}}{1}$ $? \text{ km} = 864.57 \text{ km}$ $? \text{ km} = 864.6 \text{ km}$
<p>Convert 22 gal. (US) to L</p> $22 \text{ gal. (US)} = 83.27 \text{ L}$ $\frac{? \text{ L}}{22 \text{ gal. (US)}} = \frac{3.785 \text{ L}}{1 \text{ gal. (US)}}$ $\frac{(? \text{ L} \times 22 \text{ gal. (US)})}{22 \text{ gal. (US)}} = \frac{(3.785 \text{ L} \times 22 \text{ gal. (US)})}{1 \text{ gal. (US)}}$ $? \text{ L} = \frac{(3.785 \text{ L} \times 22 \text{ gal. (US)})}{1 \text{ gal. (US)}}$ $? \text{ L} = \frac{83.27 \text{ L}}{1}$ $? \text{ L} = 83.27 \text{ L}$	<p>Convert 14 oz. to g</p> $14 \text{ oz.} = 396.6 \text{ g}$ $\frac{? \text{ g}}{14 \text{ oz.}} = \frac{28.35 \text{ g}}{1 \text{ oz.}}$ $\frac{(? \text{ g} \times 14 \text{ oz.})}{14 \text{ oz.}} = \frac{(28.35 \text{ g} \times 14 \text{ oz.})}{1 \text{ oz.}}$ $? \text{ g} = \frac{(28.35 \text{ g} \times 14 \text{ oz.})}{1 \text{ oz.}}$ $? \text{ g} = \frac{396.6 \text{ g}}{1}$ $? \text{ g} = 396.6 \text{ g}$
<p>Convert 75°F to C Round to the nearest whole number.</p> $75^\circ\text{F} = 24^\circ\text{C}$ $(75^\circ\text{F} - 32) \div 1.8 = 23.8(\dots)^\circ\text{C} = 24^\circ\text{C}$	<p>Convert 8°C to °F Round to the nearest whole number.</p> $8^\circ\text{C} = 46^\circ\text{F}$ $(8^\circ\text{C} \times 1.8) + 32 = 46.4^\circ\text{F} = 46^\circ\text{F}$

Convert 27 in. to cm

$$27 \text{ in.} = 68.58 \text{ cm}$$

$$\frac{? \text{ cm}}{27 \text{ in.}} = \frac{2.54 \text{ cm}}{1 \text{ in.}}$$

$$\frac{(? \text{ cm} \times 27 \text{ in.})}{27 \text{ in.}} = \frac{(2.54 \text{ cm} \times 27 \text{ in.})}{1 \text{ in.}}$$

$$? \text{ cm} = \frac{(2.54 \text{ cm} \times 27 \text{ in.})}{1 \text{ in.}}$$

$$? \text{ cm} = \frac{68.58 \text{ cm}}{1}$$

$$? \text{ cm} = 68.58 \text{ cm}$$

Convert 231 yd. to m

Round to the nearest tenth.

$$231 \text{ yd.} = 211.9 \text{ m}$$

$$\frac{? \text{ m}}{231 \text{ yd.}} = \frac{1 \text{ m}}{1.09 \text{ yd.}}$$

$$\frac{(? \text{ m} \times 231 \text{ yd.})}{231 \text{ yd.}} = \frac{(1 \text{ m} \times 231 \text{ yd.})}{1.09 \text{ yd.}}$$

$$? \text{ m} = \frac{(1 \text{ m} \times 231 \text{ yd.})}{1.09 \text{ yd.}}$$

$$? \text{ m} = \frac{231 \text{ m}}{1.09}$$

$$? \text{ m} = 211.926(\dots) \text{ m}$$

$$? \text{ m} = 211.9 \text{ m}$$

Convert 93 kg to lb.

$$93 \text{ kg} = 204.6 \text{ lb.}$$

$$\frac{? \text{ lb.}}{93 \text{ kg}} = \frac{2.2 \text{ lb.}}{1 \text{ kg}}$$

$$\frac{(? \text{ lb.} \times 93 \text{ kg})}{93 \text{ kg}} = \frac{(2.2 \text{ lb.} \times 93 \text{ kg})}{1 \text{ kg}}$$

$$? \text{ lb.} = \frac{(2.2 \text{ lb.} \times 93 \text{ kg})}{1 \text{ kg}}$$

$$? \text{ lb.} = \frac{204.6 \text{ lb.}}{1}$$

$$? \text{ lb.} = 204.6 \text{ lb.}$$

Convert 37 in. to mm

$$37 \text{ in.} = 939.8 \text{ mm}$$

$$\rightarrow \frac{? \text{ cm}}{37 \text{ in.}} = \frac{2.54 \text{ cm}}{1 \text{ in.}}$$

$$\frac{(? \text{ cm} \times 37 \text{ in.})}{37 \text{ in.}} = \frac{(2.54 \text{ cm} \times 37 \text{ in.})}{1 \text{ in.}}$$

$$? \text{ cm} = \frac{(2.54 \text{ cm} \times 37 \text{ in.})}{1 \text{ in.}}$$

$$? \text{ cm} = \frac{93.98 \text{ cm}}{1}$$

$$? \text{ cm} = 93.98 \text{ cm}$$

$$\Rightarrow \frac{? \text{ mm}}{93.98 \text{ cm}} = \frac{10 \text{ mm}}{1 \text{ cm}}$$

$$\frac{(? \text{ mm} \times 93.98 \text{ cm})}{93.98 \text{ cm}} = \frac{(10 \text{ mm} \times 93.98 \text{ cm})}{1 \text{ cm}}$$

$$? \text{ mm} = \frac{(10 \text{ mm} \times 93.98 \text{ cm})}{1 \text{ cm}}$$

$$? \text{ mm} = \frac{939.8 \text{ mm}}{1}$$

$$? \text{ mm} = 939.8 \text{ mm}$$

Convert $17\frac{1}{2}$ cm to ft.
Round to the nearest tenth.

$$17\frac{1}{2} \text{ cm} = 0.6 \text{ ft.}$$

$$\longrightarrow \frac{? \text{ in.}}{17.5 \text{ cm}} = \frac{1 \text{ in.}}{2.54 \text{ cm}}$$

$$\frac{(? \text{ in.} \times 17.5 \text{ cm})}{17.5 \text{ cm}} = \frac{(1 \text{ in.} \times 17.5 \text{ cm})}{2.54 \text{ cm}}$$

$$? \text{ in.} = \frac{(1 \text{ in.} \times 17.5 \text{ cm})}{2.54 \text{ cm}}$$

$$? \text{ in.} = \frac{17.5 \text{ in.}}{2.54}$$

$$? \text{ in.} = 6.88(\dots) \text{ in.}$$

$$\implies \frac{? \text{ ft.}}{6.88(\dots) \text{ in.}} = \frac{1 \text{ ft.}}{12 \text{ in.}}$$

$$\frac{(? \text{ ft.} \times 6.88(\dots) \text{ in.})}{6.88(\dots) \text{ in.}} = \frac{(1 \text{ ft.} \times 6.88(\dots) \text{ in.})}{12 \text{ in.}}$$

$$? \text{ ft.} = \frac{(1 \text{ ft.} \times 6.88(\dots) \text{ in.})}{12 \text{ in.}}$$

$$? \text{ ft.} = \frac{6.88(\dots) \text{ ft.}}{12}$$

$$? \text{ ft.} = 0.574(\dots) \text{ ft.}$$

$$? \text{ ft.} = 0.6 \text{ ft.}$$

Convert $43,560 \text{ yd}^2$ to mi^2
Round to the nearest thousandth.

$$43,560 \text{ yd}^2 = 0.014 \text{ mi}^2$$

$$\longrightarrow \frac{? \text{ ac}}{43,560 \text{ yd}^2} = \frac{1 \text{ ac}}{4840 \text{ yd}^2}$$

$$\frac{(? \text{ ac} \times 43,560 \text{ yd}^2)}{43,560 \text{ yd}^2} = \frac{(1 \text{ ac} \times 43,560 \text{ yd}^2)}{4840 \text{ yd}^2}$$

$$? \text{ ac} = \frac{(1 \text{ ac} \times 43,560 \text{ yd}^2)}{4840 \text{ yd}^2}$$

$$? \text{ ac} = \frac{43,560 \text{ ac}}{4840}$$

$$? \text{ ac} = 9 \text{ ac}$$

$$\implies \frac{? \text{ mi}^2}{9 \text{ ac}} = \frac{1 \text{ mi}^2}{640 \text{ ac}}$$

$$? \text{ mi}^2 = \frac{(? \text{ mi}^2 \times 9 \text{ ac})}{9 \text{ ac}} = \frac{(1 \text{ mi}^2 \times 9 \text{ ac})}{640 \text{ ac}}$$

$$? \text{ mi}^2 = \frac{(1 \text{ mi}^2 \times 9 \text{ ac})}{640 \text{ ac}}$$

$$? \text{ mi}^2 = \frac{9 \text{ mi}^2}{640}$$

$$? \text{ mi}^2 = 0.0140625 \text{ mi}^2$$

$$? \text{ mi}^2 = 0.014 \text{ mi}^2$$

Convert 27 mL to fluid oz. (US)
Round to the nearest hundredth

$$27 \text{ mL} = 0.91 \text{ fl. oz. (US)}$$

$$\frac{? \text{ fl. oz. (US)}}{27 \text{ mL}} = \frac{1 \text{ fl. oz. (US)}}{29.57 \text{ mL}}$$

$$\frac{(? \text{ fl. oz. (US)} \times 27 \text{ mL})}{27 \text{ mL}} = \frac{(1 \text{ fl. oz. (US)} \times 27 \text{ mL})}{29.57 \text{ mL}}$$

$$? \text{ fl. oz. (US)} = \frac{(1 \text{ fl. oz. (US)} \times 27 \text{ mL})}{29.57 \text{ mL}}$$

$$? \text{ fl. oz. (US)} = \frac{27 \text{ fl. oz. (US)}}{29.57}$$

$$? \text{ fl. oz. (US)} = 0.913(\dots) \text{ fl. oz. (US)}$$

$$? \text{ fl. oz. (US)} = 0.91 \text{ fl. oz. (US)}$$

Convert 17 L to gal. (US)
Round to the nearest tenth.

$$17 \text{ L} = 4.5 \text{ gal. (US)}$$

$$\frac{? \text{ gal. (US)}}{17 \text{ L}} = \frac{1 \text{ gal. (US)}}{3.785 \text{ L}}$$

$$\frac{(? \text{ gal. (US)} \times 17 \text{ L})}{17 \text{ L}} = \frac{(1 \text{ gal. (US)} \times 17 \text{ L})}{3.785 \text{ L}}$$

$$? \text{ gal. (US)} = \frac{(1 \text{ gal. (US)} \times 17 \text{ L})}{3.785 \text{ L}}$$

$$? \text{ gal. (US)} = \frac{17 \text{ gal. (US)}}{3.785}$$

$$? \text{ gal. (US)} = 4.491(\dots) \text{ gal. (US)}$$

$$? \text{ gal. (US)} = 4.5 \text{ gal. (US)}$$

Convert 133 lb. to kg
Round to the nearest hundredth.

$$133 \text{ lb.} = 60.45 \text{ kg}$$

$$\frac{? \text{ kg}}{133 \text{ lb.}} = \frac{1 \text{ kg}}{2.2 \text{ lb.}}$$

$$\frac{(? \text{ kg} \times 133 \text{ lb.})}{133 \text{ lb.}} = \frac{(1 \text{ kg} \times 133 \text{ lb.})}{2.2 \text{ lb.}}$$

$$? \text{ kg} = \frac{(1 \text{ kg} \times 133 \text{ lb.})}{2.2 \text{ lb.}}$$

$$? \text{ kg} = \frac{133 \text{ kg}}{2.2}$$

$$? \text{ kg} = 60.454(\dots) \text{ kg}$$

$$? \text{ kg} = 60.45 \text{ kg}$$

Convert 82 ft. to m

$$82 \text{ ft.} = 25 \text{ m}$$

$$\frac{? \text{ m}}{82 \text{ ft.}} = \frac{1 \text{ m}}{3.28 \text{ ft.}}$$

$$\frac{(? \text{ m} \times 82 \text{ ft.})}{82 \text{ ft.}} = \frac{(1 \text{ m} \times 82 \text{ ft.})}{3.28 \text{ ft.}}$$

$$? \text{ m} = \frac{(1 \text{ m} \times 82 \text{ ft.})}{3.28 \text{ ft.}}$$

$$? \text{ m} = \frac{82 \text{ m}}{3.28}$$

$$? \text{ m} = 25 \text{ m}$$

PERCENTAGES, DECIMALS & FRACTIONS



QUESTIONS

In the Workplace: Workers regularly use percentages, decimals and fractions. They may have to calculate and convert measurements from fractions to decimals/decimals to fractions. They may work with percent when handling invoices, calculating amounts of materials used, or reviewing yearly or quarterly sales data.

Convert 61% to a fraction. <i>61/100</i>	Convert $\frac{5}{8}$ to percent. <i>62.5%</i>
Convert 73% to a fraction. <i>73/100</i>	Convert $\frac{15}{16}$ to percent. <i>Round your answer to the nearest tenth.</i> <i>93.8%</i>
Convert 1.32 to a percentage. <i>132%</i>	Convert $\frac{25}{32}$ to a decimal. <i>Round your answer to the nearest tenth.</i> <i>.8</i>
Convert .585 to a percentage. <i>58.5%</i>	Convert $\frac{7}{16}$ to a decimal. <i>Round your answer to the nearest hundredth.</i> <i>.44</i>
Convert 187% to a decimal. <i>1.87</i>	Convert .85 to a fraction. <i>85/100 reduced = 17/20</i>
Convert 77% to a decimal. <i>.77</i>	Convert 4.2 to a fraction. <i>4 2/10 reduced = 4 1/5</i>
Convert $\frac{17}{32}$ to a decimal. <i>Round your answer to the nearest tenth.</i> <i>.5</i>	Convert $\frac{13}{16}$ to a decimal. <i>Round your answer to the nearest tenth.</i> <i>.8</i>
Convert .67 to a fraction. <i>67/100</i>	Convert .88 to a fraction. <i>88/100 reduced = 22/25</i>

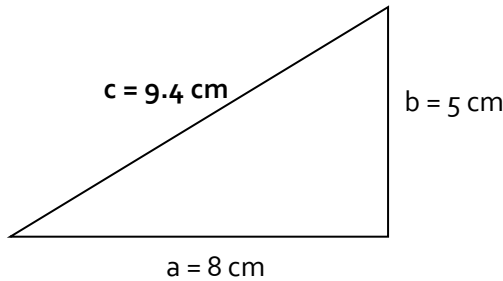
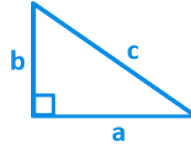
PYTHAGOREAN THEOREM



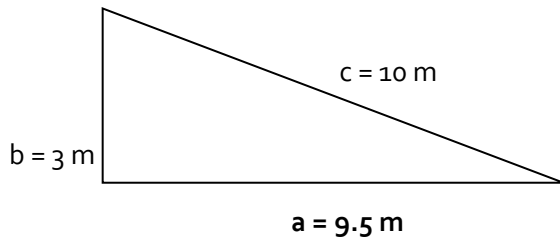
QUESTIONS

In the Workplace: Practice the Pythagorean theorem calculation by completing the questions on the next two pages. Round your answers to the nearest tenth.

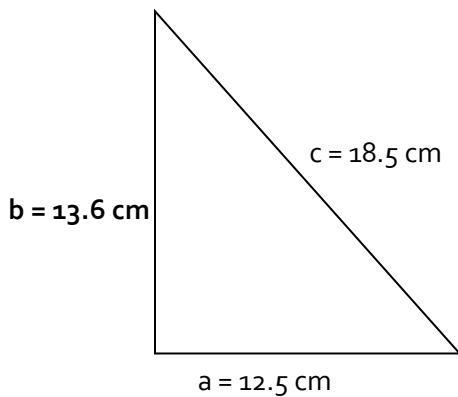
Pythagorean Theorem: $a^2 + b^2 = c^2$



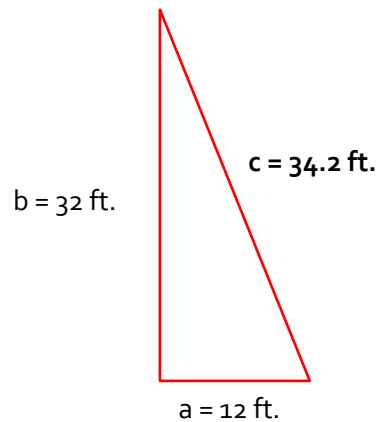
$$\begin{aligned} a &= 8 \text{ cm} & 8^2 + 5^2 &= c^2 \\ b &= 5 \text{ cm} & 64 + 25 &= c^2 \\ c &= 9.4 \text{ cm} & c^2 &= 89 \\ & & \sqrt{c^2} &= 9.4 \text{ cm} \end{aligned}$$



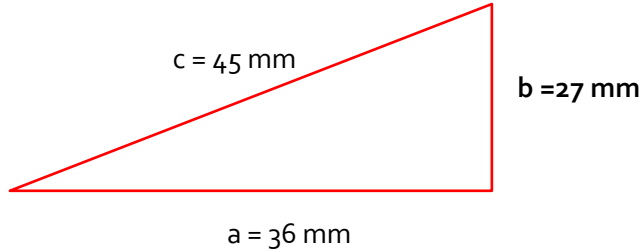
$$\begin{aligned} a &= 9.5 \text{ m} & a^2 + 3^2 &= 10^2 \\ b &= 3 \text{ m} & a^2 &= 10^2 - 3^2 \\ c &= 10 \text{ m} & a^2 &= 100 - 9 \\ & & a^2 &= 91 \\ & & \sqrt{a^2} &= 9.5 \text{ m} \end{aligned}$$



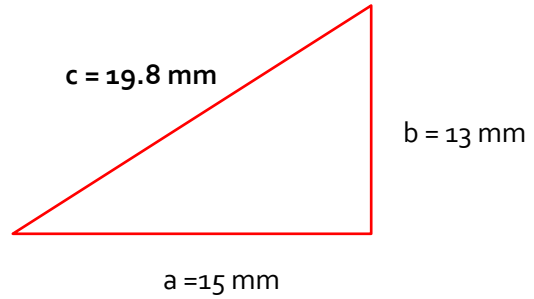
$$\begin{aligned} a &= 12.5 \text{ cm} & 12.5^2 + b^2 &= 18.5^2 \\ b &= 13.6 \text{ cm} & b^2 &= 18.5^2 - 12.5^2 \\ c &= 18.5 \text{ cm} & b^2 &= 342.25 - 156.25 \\ & & b^2 &= 186 \\ & & \sqrt{b^2} &= 13.6 \text{ cm} \end{aligned}$$



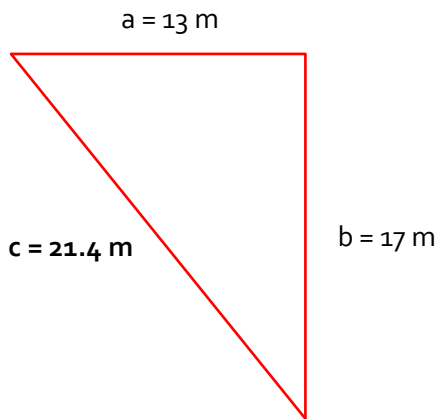
$$\begin{aligned} a &= 12 \text{ ft.} & 12^2 + 32^2 &= c^2 \\ b &= 32 \text{ ft.} & 144 + 1024 &= c^2 \\ c &= 34.2 \text{ ft.} & c^2 &= 1168 \\ & & \sqrt{c^2} &= 34.2 \text{ ft.} \end{aligned}$$



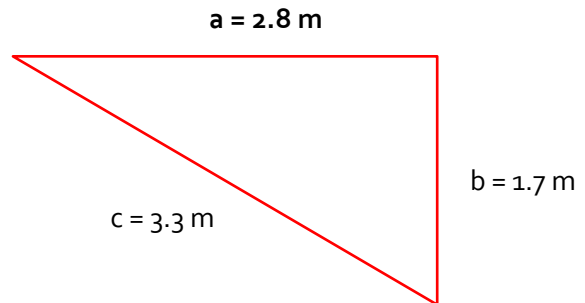
$$\begin{aligned} a &= 36 \text{ mm} & 36^2 + b^2 &= 45^2 \\ \mathbf{b} &= \mathbf{27 \text{ mm}} & b^2 &= 45^2 - 36^2 \\ c &= 45 \text{ mm} & b^2 &= 2025 - 1296 \\ & & b^2 &= 729 \\ & & \sqrt{b^2} &= \mathbf{27 \text{ mm}} \end{aligned}$$



$$\begin{aligned} a &= 15 \text{ mm} & 15^2 + 13^2 &= c^2 \\ b &= 13 \text{ mm} & 225 + 169 &= c^2 \\ c &=? \text{ mm} & c^2 &= 394 \\ & & \sqrt{c^2} &= \mathbf{19.8 \text{ mm}} \end{aligned}$$



$$\begin{aligned} a &= 13 \text{ m} & 13^2 + 17^2 &= c^2 \\ b &= 17 \text{ m} & 169 + 289 &= c^2 \\ \mathbf{c} &= \mathbf{21.4 \text{ m}} & c^2 &= 458 \\ & & \sqrt{c^2} &= \mathbf{21.4 \text{ m}} \end{aligned}$$



$$\begin{aligned} \mathbf{a} &= \mathbf{2.8 \text{ m}} & a^2 + 1.7^2 &= 3.3^2 \\ b &= 1.7 \text{ m} & a^2 &= 3.3^2 - 1.7^2 \\ c &= 3.3 \text{ m} & &= 10.89 - 2.89 \\ & & a^2 &= 8 \\ & & \sqrt{a^2} &= \mathbf{2.8 \text{ m}} \end{aligned}$$

ROUNDING WHOLE NUMBERS & DECIMALS



QUESTIONS

Check your understanding of rounding by completing the tasks or answering the questions below.

1. Round 5.36 to the nearest whole number.

5

2. Round 32.74 to the nearest whole number.

33

3. Round 10.386 to the nearest tenth.

10.4

4. Round 0.4838 to the nearest hundredth.

.48

5. You need a rough budget for construction materials. What is the nearest ten thousand dollars to \$76,690.00?

\$80,000

6. You used \$90.00 cash to pay \$83.68 for some materials. To the nearest whole number, how much change should you have?

\$6

7. You need 7.82 cans of paint to cover 782 sq. ft. What is the nearest number of full cans you should buy?

8

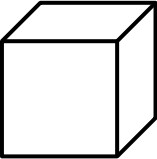
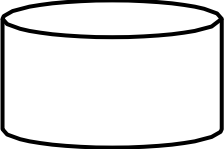
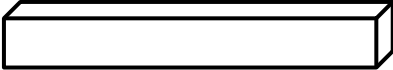
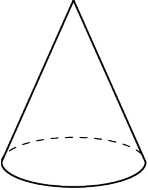

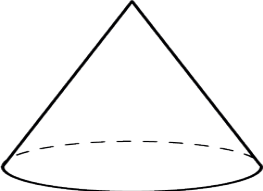
VOLUME



QUESTIONS

In the Workplace: Volume calculations are used for a variety of tasks. As examples, it may be necessary to determine the volume of land to remove or fill to add to a site, or the volume of material trucks can haul. Plumbers and pipefitters calculate the volume of pipe to determine which pipe to use or the best size of hot water tank to install.

Calculate volume for each of the shapes below. Write down the formula you use in each case. Remember to include units in your answers. Round to the nearest tenth if using 3.14 and the nearest hundredth if using pi.

	$l, w, h = 23 \text{ mm}$ $V = L \times W \times H$ $V = 23 \times 23 \times 23$ $V = 12,167 \text{ mm}^3$
	$r = 16 \text{ m}$ $h = 13 \text{ m}$ $V = \pi r^2 h$ $V = 3.14 \times 256 \times 13$ $V = 10,449.9 \text{ m}^3$
	$l = 37 \text{ cm}$ $w = 10 \text{ cm}$ $h = 8 \text{ cm}$ $V = L \times W \times H$ $V = 37 \times 10 \times 8$ $V = 2,960 \text{ cm}^3$
	$r = 7 \text{ in.}$ $h = 15 \text{ in.}$ $V = 3.14 \times 49 \times 15/3$ $V = 2307.9/3$ $V = 769.3 \text{ in.}^3$ <div style="float: right; margin-left: 20px;"> $V = \frac{\pi r^2 h}{3}$ </div>
	$r = 12 \text{ m}$ $h = 72 \text{ m}$ $V = \pi r^2 h$ $V = 3.14 \times 144 \times 72$ $V = 32,555.5 \text{ m}^3$
	$r = 11 \text{ ft.}$ $h = 11 \text{ ft.}$ $V = 3.14 \times 121 \times 11/3$ $V = 4,179.34/3$ $V = 1,393.1 \text{ ft.}^3$ <div style="float: right; margin-left: 20px;"> $V = \frac{\pi r^2 h}{3}$ </div>