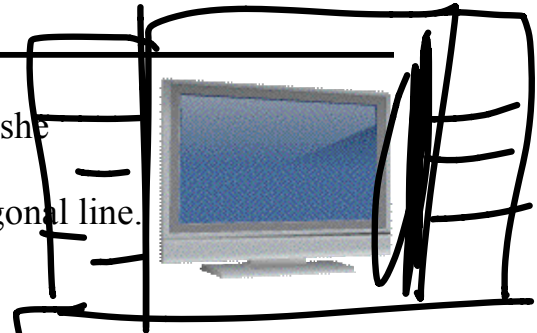


Jane's T.V.

Jane is hoping to buy a large new television for her den, but she isn't sure what size screen will be suitable for her wall. This is because television screens are measured by their diagonal line.



This 42 inch screen measures 32 inches along the base.

1. What is the height of the screen?

$$\sqrt{740}$$

$$27.2$$

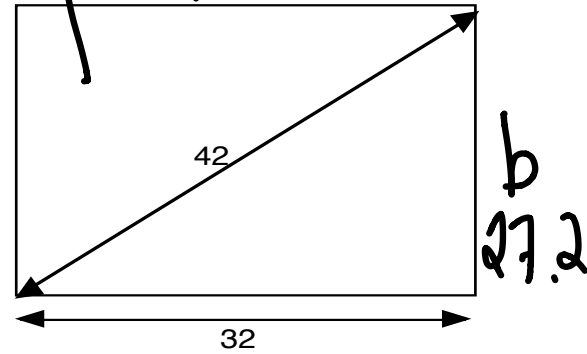
Show how you know.

$$32^2 + b^2 = 42^2$$

$$1024 + b^2 = 1764$$

$$b^2 = 740$$

$$\begin{array}{r} 32 \\ \times 27.2 \\ \hline \end{array}$$



2. What is the area of the screen?

$$870.5 \text{ square inches}$$

3. Jane would like to have a screen 40 inches wide and 32 inches high.

About what screen size will she need to buy? 51.2 inches

Show how you figured this out

$$\begin{array}{r} 1100 \\ 1024 \\ \hline 2076 \end{array}$$

