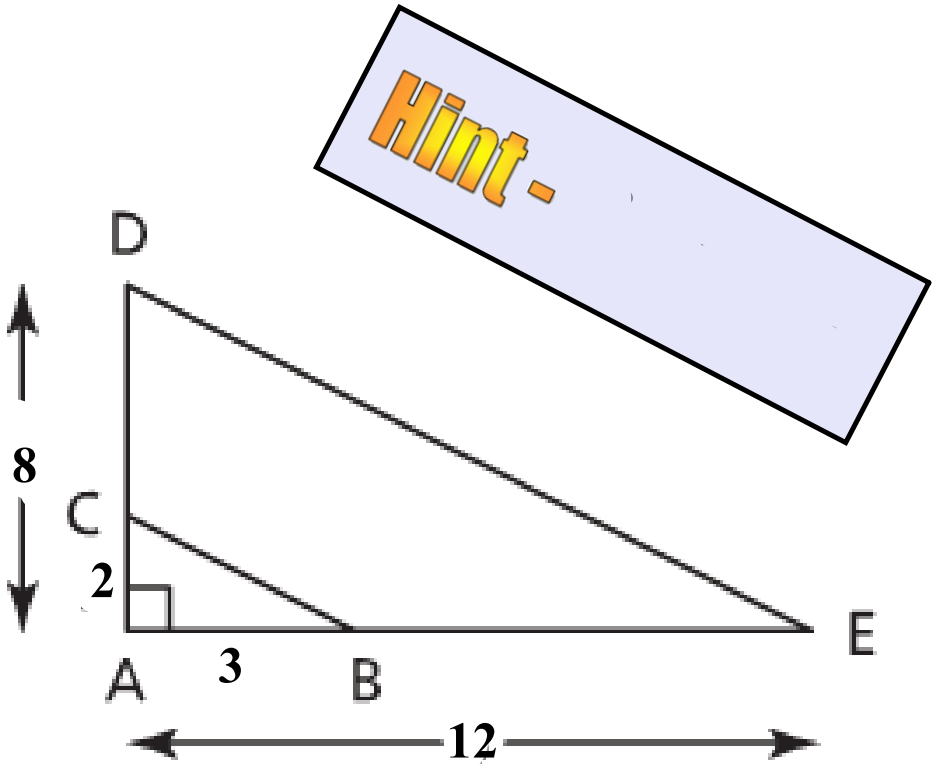
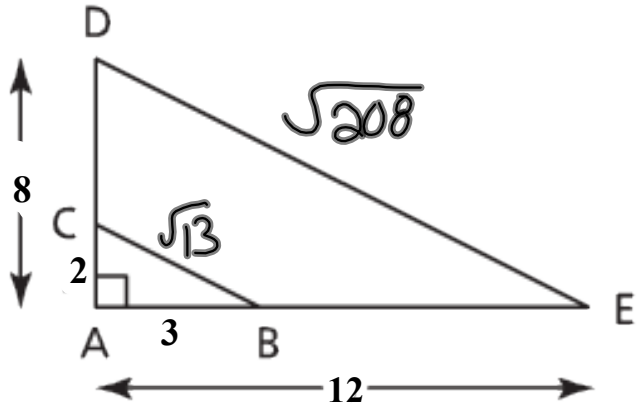


Use the diagram to explain that $\sqrt{208} = 4\sqrt{13}$



Similar Triangles

$\triangle$ ABC $\triangle$ ADE

ADE is 4 times greater than ABC

$\triangle$ ABC	$\triangle$ ADE
$c^2 = a^2 + b^2$	$c^2 = a^2 + b^2$
$c^2 = 3^2 + 2^2$	$c^2 = 8^2 + 12^2$
$c^2 = 9 + 4$	$c^2 = 64 + 144$
$c^2 = 13$	$c^2 = 208$
$c = \sqrt{13}$	$c = \sqrt{208}$

Therefore $4\sqrt{13} = \sqrt{208}$

A cube has a volume of 875 cm^3. Write the edge length of the cube as a radical in simplest form.

$\rightarrow \quad \sqrt[3]{875}$

$= \sqrt[3]{5 \times 5 \times 5 \times 7}$

$= \quad 5\sqrt[3]{7}$

A cube has a Surface Area of 648 cm^2. Write the edge length of the cube as a radical in simplest form.

→ $648 / 6 = 108\ cm^2$

→ $\sqrt{108} = \sqrt{2 \times 2 \times 3 \times 3 \times 3}$

$= \sqrt{2 \times 2 \times 3 \times 3 \times 3}$

$= 2 \times 3 \sqrt{3}$

$= 6\sqrt{3}$

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#4 a - d
#5 a - d
#7
#10 a, c, d, f, g, h
#11 a - d
#12 a, b, g, h
#14
#15
#16