

In addition to trying to answer these please rate as E-easy, M-medium, H-hard

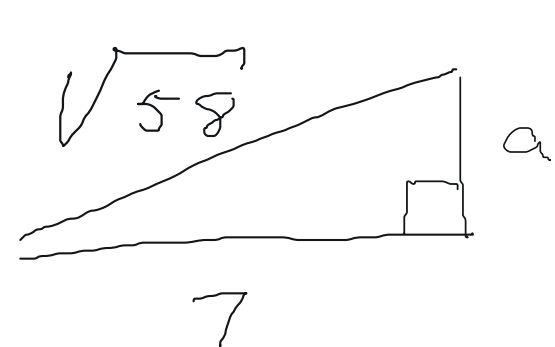
whiteboard: 20240325.A.math.eval

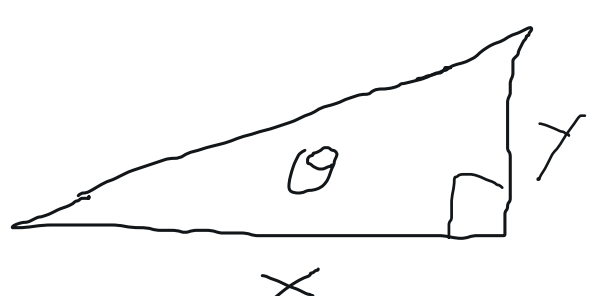
Q1)  $\frac{1}{2} + \frac{1}{3} =$

Q2)  $\frac{2}{9} \times \frac{3}{8} =$

Q3)  $\frac{1}{5} \div \frac{10}{7} =$

Q4) solve for x:  $3x = 2x + 4$

Q5) solve for a: 

Q6) Given 

Q6A) What is  $\tan \theta$ ?

Q6B) What is  $\sin \theta$ ?

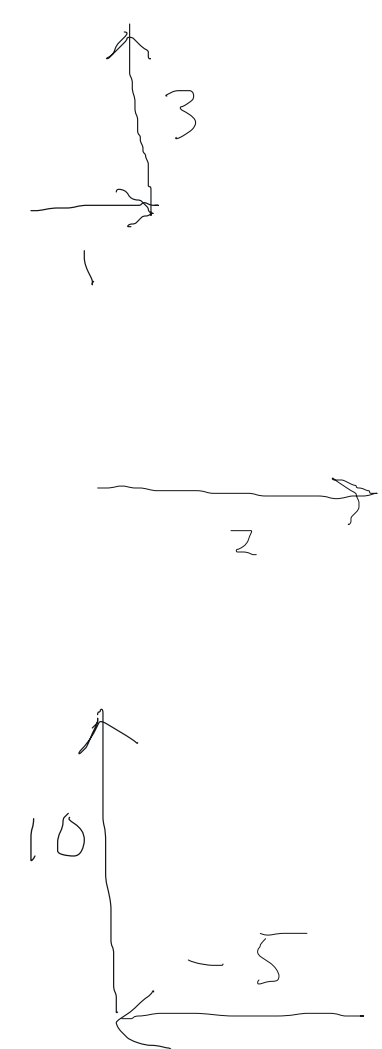
Q6C) What is  $\cos \theta$ ?

Q7) Given 3 vectors,  $\vec{a}$ ,  $\vec{b}$ ,  $\vec{c}$ , where:

$\hat{a} = 1\hat{i} + 3\hat{j} = \langle 1, 3 \rangle$

$\hat{b} = 2\hat{i} + 4\hat{j} = \langle 2, 4 \rangle$

$\hat{c} = -5\hat{i} + 10\hat{j} = \langle -5, 10 \rangle$



Q7A)  $\hat{a} + \hat{b} = ?$

Q7B)  $\hat{a} - \hat{b} = ?$

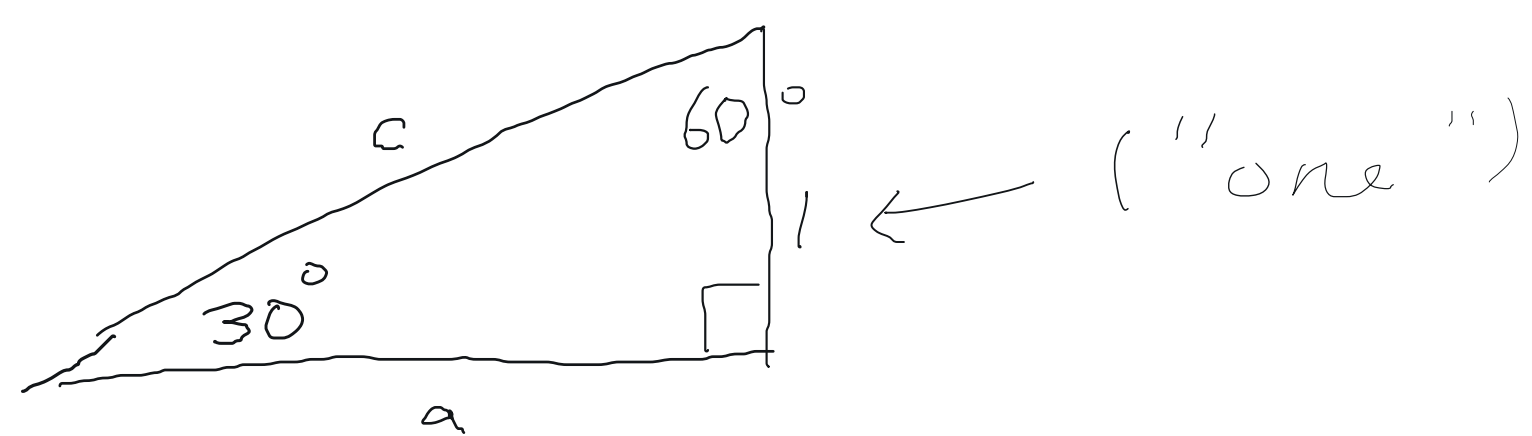
Q7C)  $\hat{a} + \hat{c} = ?$

Q7D)  $\hat{b} + \hat{b} = ?$

Q7E)  $\hat{c} - \hat{c} = ?$

Q7F)  $5\hat{a} - \hat{c} = ?$

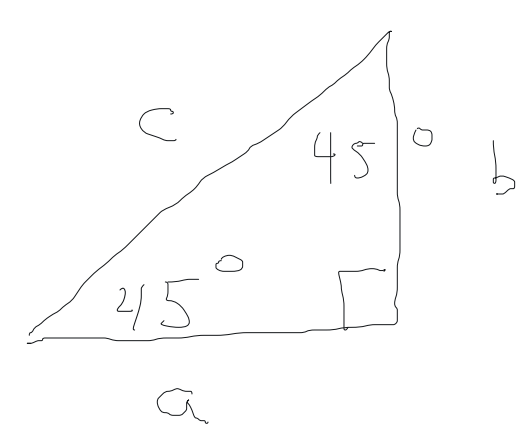
Q8) Common right triangle. Identify the other sides



$a = ?$

$c = ?$

Q9) Common right triangle



Given  $c = 10\sqrt{2}$ , determine:

$a = ?$

$b = ?$

Q10) Q10A)  $\frac{x^5}{x^2} = ?$

Q10B)  $\frac{a^4}{a^{21}} = ?$

Q10C)  $\frac{c^{-5}}{c^{-10}} = ?$