

1. Evaluate  $x - yz$  when  $x = \frac{1}{6}$ ,  $y = -4\frac{1}{3}$ , and  $z = 2\frac{1}{2}$ .

$$\begin{aligned}
 & \left(\frac{1}{6}\right) - \left(-4\frac{1}{3}\right)\left(2\frac{1}{2}\right) \\
 &= \frac{1}{6} - \left(-\frac{13}{3}\right)\left(\frac{5}{2}\right) \\
 &= \frac{1}{6} - \left(-\frac{65}{6}\right) \\
 &= \frac{1}{6} + \frac{65}{6}
 \end{aligned}$$

$= \frac{66}{6}$   
 $= \boxed{11}$

2. Find the area of a circle with a radius of 7 feet (use  $\pi \approx \frac{22}{7}$ ).

$$\begin{aligned}
 A &= \pi r^2 \\
 &\approx \left(\frac{22}{7}\right)(7)^2 \\
 &= \left(\frac{22}{\cancel{7}^1}\right)\left(\frac{\cancel{7}^7}{1}\right) = \boxed{154 \text{ ft}^2}
 \end{aligned}$$

3. Subtract:  $\left(\frac{2}{5}x^2 + \frac{5}{16}\right) - \left(\frac{1}{10}x^2 - \frac{3}{4}\right)$

$$\begin{aligned}
 &= \frac{2}{5}x^2 + \frac{5}{16} - \frac{1}{10}x^2 + \frac{3}{4} \\
 &= \boxed{\frac{3}{10}x^2 + \frac{17}{16}}
 \end{aligned}$$

$\frac{2}{5} - \frac{1}{10} = \frac{4}{10} - \frac{1}{10} = \frac{3}{10}$   
 $\frac{5}{16} + \frac{3}{4} = \frac{5}{16} + \frac{12}{16} = \frac{17}{16}$

4. Multiply:  $(\frac{3}{4}x - 5)(\frac{1}{2}x + 8)$

$$= \frac{3}{4}x \cdot \frac{1}{2}x + \frac{3}{4}x \cdot 8 - 5 \cdot \frac{1}{2}x - 5 \cdot 8$$

$$= \frac{3}{8}x^2 + \underline{6x} - \underline{\frac{5}{2}x} - 40$$

$$= \boxed{\frac{3}{8}x^2 + \frac{7}{2}x - 40}$$

$$\frac{3}{4} \cdot 8 = \frac{3}{\cancel{4}} \cdot \frac{8^2}{1} = 6$$

$$5 \cdot \frac{1}{2} = \frac{5}{1} \cdot \frac{1}{2} = \frac{5}{2}$$

$$6 - \frac{5}{2} = \frac{12}{2} - \frac{5}{2} = \frac{7}{2}$$

Q: What question can someone ask all day long, always get completely different answers, and yet all the answers could be correct?