

Math 70 Quiz #4 Answers

1. (a) $-13 - (-10) = -13 + 10 = \boxed{-3}$

(b) $-12\left(-\frac{2}{3}\right) = -\frac{12}{1}\left(-\frac{2}{3}\right) = \frac{24}{3} = \boxed{8}$

(c) $(-10)^3 = (-10)(-10)(-10) = \boxed{-1000}$

(d) $3(4 - 6)^2 - \frac{16}{2} = 3(-2)^2 - \frac{16}{2}$
 $= 3(4) - \frac{16}{2}$
 $= 12 - 8$
 $= \boxed{4}$

2. (a) $-0.3(3 - 2a) = -0.3(3) - (-0.3)(2a)$
 $= -0.9 - (-0.6a)$
 $= \boxed{-0.9 + 0.6a}$

(b) $4x\left(\frac{1}{4}y + x\right) = 4x\left(\frac{1}{4}y\right) + 4x(x)$
 $= \boxed{xy + 4x^2}$ since $4\left(\frac{1}{4}\right) = \frac{4}{4} = 1$

3. Difference in elevation = $8850 - (-417)$ meters
 $= 8850 + 417$ meters
 $= 9267$ meters

$\boxed{\text{The difference in elevation is 9267 meters.}}$