Algebra II Quiz

Name _____
Period _____

1. Evaluate the expression if w = -3, x = 4, y = 2.6, and z = $\frac{1}{3}$: y + x - z

$y + x - z$

$2.6 + 4 - \frac{1}{3}$

$6.6 - \frac{1}{3}$

$6\frac{6}{10} - \frac{1}{3} = \boxed{6\frac{4}{15}}$ or $\boxed{\frac{94}{15}}$

2. Evaluate the expression if a = -4, b = -0.8, c = 5, and d = $\frac{1}{5}$: $\frac{ac}{d+b}$

$\frac{ac}{d+b}$

$\frac{(-4)(5)}{\frac{1}{5} + -.8}$

$\frac{-20}{.2 + -.8}$

$\frac{-20}{-.6}$

$\frac{20}{\frac{6}{10}}$

$20 \cdot \frac{10}{6} = \frac{200}{6} = \boxed{33\frac{1}{3} \text{ or } \frac{100}{3}}$

3. Evaluate each expression if w=$\frac{3}{4}$, x = 8, y = -2, and z = 0.4: $x^3 + 2y^4$

$x^3 + 2y^4$

$(8)^3 + 2(-2)^4$

$512 + 32 = \boxed{544}$

4. Find the additive inverse of -8.

8

5. Name the property illustrated:
-7y + 7y = 0

Inverse property of addition

Algebra II Quiz

Name _____
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1. Evaluate the expression if w = -3, x = 4, y = 2.6, and z = $\frac{1}{3}$: 4(x - w)

$4(x - w)$

$4(4 - -3)$

$4(4 + 3)$

$4(7) = \boxed{28}$

2. Evaluate the expression if a = -4, b = -0.8, c = 5, and d = $\frac{1}{5}$: $\frac{b^2c^2}{ad}$

$\frac{b^2c^2}{ad}$

$\frac{(-.8)^2(5)^2}{(-4)(\frac{1}{5})}$

$\frac{(.64)(25)}{-\frac{4}{5}}$

$(.64)(25)(-\frac{5}{4})$

$\boxed{-20}$

3. Evaluate each expression if w=$\frac{3}{4}$, x = 8, y = -2, and z = 0.4: $(x - 6z)^2$

$(x - 6z)^2$

$(8 - 6(.4))^2$

$(8 - \frac{12}{5})^2$

$(\frac{40}{5} - \frac{12}{5})^2$

$(\frac{28}{5})^2 = \boxed{\frac{784}{25} \text{ or } 31.36}$

4. Find the multiplicative inverse of -8.

$\frac{-1}{8}$

5. Name the property illustrated:
$8\sqrt{11} + 5\sqrt{11} = (8 + 5)\sqrt{11}$.

Distributive Property

Algebra II Quiz

Name _____
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1. Evaluate the expression if w = -3, x = 4, y = 2.6, and z = $\frac{1}{3}$: w - 2x + y ÷ 2

$w - 2x + \frac{y}{2}$

$-3 - 2(4) + \frac{2.6}{2}$

$-3 - 8 + 1.3$

$-11 + 1.3 = \boxed{-9.7}$

2. Evaluate the expression if a = -4, b = -0.8, c = 5, and d = $\frac{1}{5}$: $\frac{a+b}{c-d}$

$\frac{a+b}{c-d}$ $\quad \frac{-4.8}{\frac{24}{5}}$

$\frac{-4+-.8}{5-\frac{1}{5}}$ $\quad (-4.8)\left(\frac{5}{24}\right) = \boxed{-1}$

$\frac{-4.8}{\frac{25}{5}-\frac{1}{5}}$

3. Evaluate each expression if w=$\frac{3}{4}$, x = 8, y = -2, and z = 0.4: $2(6w - 2y) - 8z$

$2(6w-2y)-8z$

$2\left(6\left(\frac{3}{4}\right)-2(-2)\right)-8(.4)$

$2\left(\frac{18}{4}+4\right)-3.2$

$2\left(\frac{17}{2}\right)-3.2$

$17 - 3.2$

$\boxed{13.8}$

4. Find the additive inverse of $\frac{-3}{8}$.

$\frac{3}{8}$

5. Name the property illustrated: (16 + 7) + 23 = 16 + (7 + 23)

Associative Property

Algebra II Quiz

Name _____
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1. Evaluate the expression if w = -3, x = 4, y = 2.6, and z = $\frac{1}{3}$: 9z - 4y + 2w

$9z - 4y + 2w$

$9\left(\frac{1}{3}\right) - 4(2.6) + 2(-3)$

$3 - 10.4 - 6$

$3 - 16.4$

$\boxed{-13.4}$

2. Evaluate the expression if a = -4, b = -0.8, c = 5, and d = $\frac{1}{5}$: $\frac{a-b}{bd}$

$\frac{a-b}{bd}$ $\quad \frac{-3.2}{-.16} = \boxed{20}$

$\frac{-4--.8}{(-.8)\left(\frac{1}{5}\right)}$

$\frac{-3.2}{-.16}$

3. Evaluate each expression if w=$\frac{3}{4}$, x = 8, y = -2, and z = 0.4: $\frac{(y+z)^2}{xw}$

$\frac{(y+z)^2}{xw}$ $\quad \frac{\left(-\frac{8}{5}\right)^2}{6}$

$\frac{(-2+.4)^2}{8\left(\frac{3}{4}\right)}$ $\quad \left(-\frac{8}{5}\right)^2 \cdot \frac{1}{6} = \boxed{\frac{32}{75}}$

4. Find the multiplicative inverse of $\frac{-3}{8}$.

$\frac{-8}{3}$

5. Name the property illustrated: $\left(\frac{22}{7}\right)\left(\frac{7}{22}\right) = 1$

Inverse Property of multiplication
or
Property of Reciprocals