

## 2.4 Quiz

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Name: KEY  
Block: \_\_\_\_\_

1) Write as a single power. (1/1)

$$21^6 \times 21^4$$

$$21^{6+4} = 21^{10}$$

2) Write as a single power. (1/1)

$$(-6)^8 \div (-6)^3$$

$$(-6)^{8-3} = (-6)^5$$

3) Express as a single power. (1/2)

$$3^4 \times 3^9 \div 3^{11}$$

$$3^{4+9} \div 3^{11} = 3^{13-11} = 3^2$$

4) Simplify then evaluate. (1/2)

$$10^3 \times 10^3 + 10^4$$

$$10^{3+3} + 10^4 = 10^6 + 10^4 = 1000000 + 10000 = 1010000$$

5) Evaluate. (1/3)

$$2^3 \times 2^2 - 2^5 \times 2$$

$$2^{3+2} - 2^5 \times 2$$

$$2^5 - 2^{5+1}$$

$$2^5 - 2^6$$

$$\rightarrow 32 - 64 = -32$$

6) Evaluate. (1/3)

$$(-5)^3 \div (-5)^2 \times (-5)^0 + (-5)^2 \div (-5)$$

$$(-5)^{3-2} \times 1 + (-5)^{2-1}$$

$$(-5)^1 \times 1 + (-5)^1$$

$$(-5) + (-5) = -10$$