

Powers & Exponents Assignment 2 (Calculator)

1. a) $5(3)^5$
 $= 5(243)$ ✓
 $= 1215$ ✓

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25

4) $m = \frac{2a}{v^2}$
 $= \frac{2(9.81)}{100000^2}$ ✓ $100 \times 1000 = 100000$

b) $\frac{(-3)^6}{5^3}$ 3
 $= \frac{729}{125}$ ✓

$= \frac{19.62}{1 \times 10^{10}}$ ✓

$= 0.000000002 \text{ kg}$

$= 2 \times 10^{-9} \text{ kg}$

$= 0.000000001962 \text{ kg}$

$= 1.962 \times 10^{-9} \text{ kg}$ ✓

2. a) $5(3)^5$ ✓
 $= 5(243)$ ✓
 $= 1215$ ✓

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6

b) $8(-11)^5$ ✓
 $= 8(161051)$ ✓
 $= -1288408$ ✓

4

5) a) 5 (exponent) is the # of questions. ✓

b) 2 (base) is the # of possible answers. ✓

4

c) 2^{20} ✓
 $= 1048576 \text{ answers}$ ✓

3. a) $250(3)^1$ ✓
 $= 750 \text{ bacteria}$ ✓

b) $250(3)^4$ ✓
 $= 250(81)$ ✓
 $= 20250 \text{ bacteria}$ ✓

c) $250(3)^8$ ✓
 $= 250(6561)$ ✓
 $= 1640250 \text{ bacteria}$ ✓

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