Bellwork

Alg 2B Friday, September 8, 2017

1. In the xy-plane, the parabola with equation $y = (x - 11)^2$ intersects the line with equation y = 25 at two points, A and B. What is the length of \overline{AB} ?

A. 10

B. 12

C. 14

D. 16

Write each in radical form. Simplify if possible.

2.
$$G^{\frac{5}{2}}$$

3.
$$(A^2)^{-\frac{4}{3}}$$

Write in exponential form. Simplify if possible.

5.
$$\sqrt[3]{8c^9d^2}$$

6.
$$3 \cdot \sqrt[4]{(5m^3)^8}$$

Bellwork Alg 2B Friday, September 8, 2017



1. In the xy-plane, the parabola with equation $y = (x - 11)^2$ intersects the line with equation y = 25 at two points. A and B. What is the length of \overline{AB} ?

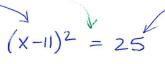
A. 10

B. 12

C. 14

D. 16

points of intersection are:



$$| (X-11)^2 = 25
 | X-11 = ±5
 | X = 5+11 = 16
 | -5+11 = 6$$

Write each in radical form. Simplify if possible.

2.
$$G^{\frac{5}{2}}$$

3.
$$(A^2)^{-\frac{4}{3}}$$

$$= \frac{1}{(A^2)^{\frac{1}{3}}}$$

$$= \frac{1}{A^{2 \cdot \frac{1}{3}}}$$

$$= \frac{1}{A^{\frac{2}{3}}}$$

$$= \frac{1}{A^{\frac{8}{3}}}$$

4.
$$B^{1,31} = \frac{131}{100}$$

Write in exponential form. Simplify if possible.

5.
$$\sqrt[3]{8c^9d^2}$$

$$= (2c^3d^{2/3})$$

6.
$$3 \cdot \sqrt[4]{(5m^3)^8}$$

= 3
$$\cdot \left[(5m^3)^8 \right]^{1/4}$$

$$= 3 \cdot \left(5m^3\right)^2$$