

GRE Arithmetic Practice Test 6

1

Reduce.

$$\sqrt{72}$$

Possible Answers:

$$6\sqrt{2}$$

$$2\sqrt{21}$$

$$36\sqrt{2}$$

$$4\sqrt{36}$$

$$2\sqrt{6}$$

Reduce.

$$\sqrt{72}$$

Possible Answers:

$$6\sqrt{2}$$

$$2\sqrt{21}$$

$$36\sqrt{2}$$

$$4\sqrt{36}$$

$$2\sqrt{6}$$

2.

**Reduce.**

$$\sqrt{32}$$

**Possible Answers:**

$$16\sqrt{2}$$

$$8\sqrt{2}$$

$$2\sqrt{2}$$

$$\sqrt{4}$$

$$4\sqrt{2}$$

3.

4.

Find the square root of 164.

Possible Answers:

$$2\sqrt{43}$$

$$2\sqrt{41}$$

$$8\sqrt{2}$$

$$\sqrt{43}$$

$$4\sqrt{41}$$

5.

Reduce.

$$\sqrt{192}$$

Possible Answers:

$$3\sqrt{4}$$

$$64\sqrt{4}$$

$$64\sqrt{3}$$

$$8\sqrt{3}$$

$$4\sqrt{3}$$

6.

Reduce.

$$\sqrt{368}$$

Possible Answers:

$$\sqrt{2}\sqrt{36}$$

$$16\sqrt{23}$$

$$6\sqrt{2}$$

$$4\sqrt{23}$$

$$2\sqrt{23}$$

7.

Find the square root of 416.

Possible Answers:

$$4\sqrt{23}$$

$$4\sqrt{26}$$

$$4\sqrt{10}$$

$$8\sqrt{26}$$

$$4\sqrt{20}$$

8.

Simplify the following:  $(\sqrt{6} + \sqrt{3}) / \sqrt{3}$

Possible Answers:

1

$$3\sqrt{2}$$

None of the other answers

$$\sqrt{3}$$

$$\sqrt{2} + 1$$

9.

what is

$$\sqrt[3]{0.0000490}$$

Possible Answers:

0.07

7

0.007

0.00007

49

10.

Simplify:  $\sqrt{576}$

Possible Answers:

$10\sqrt{12}$

$12\sqrt{6}$

$12\sqrt{3}$

24

34

11.

Simplify  $(\frac{10}{81})^{1/4}$ .

Possible Answers:

$$\frac{2}{81}$$

$$\frac{8}{81}$$

$$\frac{4}{81}$$

$$\frac{4}{9}$$

$$\frac{2}{3}$$

12.

Simplify the following radical  $\sqrt{20x^2}$ .

Possible Answers:

$$2x\sqrt{5}$$

$$2x\sqrt{10}$$

$$4\sqrt{5x}$$

$$2\sqrt{5x^2}$$

13.

Which of the following is equal to  $\sqrt{75}$ ?

Possible Answers:

$3\sqrt{5}$

$5\sqrt{3}$

$7.5\sqrt{10}$

9

14.

Simplify  $\sqrt{a^3b^4c^5}$ .

Possible Answers:

$a^2bc\sqrt{bc}$

$ab^2c^2\sqrt{ac}$

$a^2b^2c\sqrt{ab}$

$a^2b^2c^2\sqrt{bc}$

$a^2bc^2\sqrt{ac}$



15.

What is  $\sqrt{50}$ ?

Possible Answers:

$2\sqrt{5}$

10

5

$5\sqrt{2}$

$10\sqrt{2}$