## **GRE Arithmetic Practice Test 11**

**Question 1** 

Simplify the following:

 $\sqrt{125}+\sqrt{245}+\sqrt{80}$ 

Possible Answers:

 $90\sqrt{5}$ 

 $16\sqrt{5}$ 

 $3\sqrt{5} + 21\sqrt{2}$ 

 $\sqrt{450}$ 

It cannot be simplified any further

Correct answer:  $16\sqrt{5}$ 

Simplify the following:

 $\sqrt{40} + \sqrt{20} + \sqrt{160}$ 

Possible Answers:

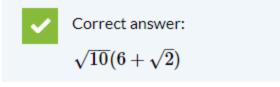
 $\sqrt{10}(6+\sqrt{2})$ 

 $4\sqrt{20}$ 

 $\sqrt{5}(5+2\sqrt{2})$ 

 $8\sqrt{10}$ 

The expression cannot be simplified any further.



$$\frac{\sqrt{243}}{\sqrt{48}} =$$

$4\sqrt{3}$
$9\sqrt{3}$
$\frac{81}{16}$
$\frac{3}{2}$
$\frac{9}{4}$
Correct answer: $\frac{9}{4}$
Our ation 1

$$\frac{\sqrt{343}}{\sqrt{63}} =$$

$3\sqrt{3}$
$7\sqrt{7}$
$\frac{3}{7}$
$\frac{7}{3}$
$\frac{49}{9}$
Correct answer: $\frac{7}{3}$

**Question 5** 

$$\frac{\sqrt{150}}{\sqrt{48}} =$$

$\frac{5\sqrt{3}}{4}$
$\frac{25\sqrt{2}}{16}$
$\frac{5\sqrt{2}}{3}$
$\frac{5\sqrt{2}}{4}$
$5\sqrt{2}$
Correct answer: $\frac{5\sqrt{2}}{4}$

Simplify: 
$$rac{2\sqrt{3}}{\sqrt{2}}+rac{4\sqrt{2}}{\sqrt{3}}$$

 $4\sqrt{3}+\sqrt{2}$ 

 $\frac{7\sqrt{6}}{3}$ 

None of the other answers

 $2\sqrt{6}$ 

 $2\sqrt{6}-4\sqrt{2}$ 

Correct answer:  $\frac{7\sqrt{6}}{3}$ 

Compare the quantities.

Quantity A:  $\sqrt{60} + \sqrt{375}$ 

Quantity B:  $\sqrt{135} + \sqrt{240}$ 

Possible Answers:

Quantity B is larger.

The two quantities are equal.

The relationship cannot be determined from the information given.

Quantity A is larger.



Correct answer:

The two quantities are equal.

Simplify the following expression:  $\sqrt{60} + \sqrt{40} + \sqrt{10}$ 

Possible Answers:

$2\sqrt{15} + 2\sqrt{20}$
$4\sqrt{15}+5\sqrt{5}$
25
$2\sqrt{15}+3\sqrt{10}$
$5\sqrt{25}$
Correct answer: $2\sqrt{15} + 3\sqrt{10}$
Duration 0

Solve for x.

Note,  $x \geq 0$ : $15\sqrt{x}-10=4\sqrt{x}+4$ 

Possible Answers:

$\frac{196}{121}$	
$\frac{841}{14}$	
81	
$\frac{196}{11}$	
$\frac{841}{5}$	
Correct answer: $\frac{196}{121}$	

Simplify the following expression:  $3\sqrt{27} + 5\sqrt{48} - 3\sqrt{147}$ 

Possible Answers:

 $8\sqrt{3}$ 

Cannot be simplified any further

 $5\sqrt{72}$   $5\sqrt{3}$   $2\sqrt{76}$ Correct answer:  $8\sqrt{3}$