



Pre-Algebra Final Exam

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This exam is comprehensive over the entire course and includes 12 questions. You have 60 minutes to complete the exam.

The exam is worth 100 points. The 8 multiple choice questions are worth 5 points each (40 points total) and the 4 free response questions are worth 15 points each (60 points total).

Mark your multiple choice answers on this cover page. For the free response questions, show your work and make sure to circle your final answer.

1. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
2. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
3. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
4. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
5. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
6. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
7. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>
8. (5 pts)	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>E</div>



1. (5 pts) What is the best number classification for the amount of money in a bank account?

☐ A Natural numbers

☐ D Whole numbers

☐ B Integers

☐ E Real numbers

☐ C Rational numbers

2. (5 pts) Simplify.

$$-7 \cdot -8$$

☐ A 56

☐ C -15

☐ E -56

☐ B -42

☐ D 15



3. (5 pts) Find the LCM (Least Common Multiple) of 12 and 10.

A 10

C 60

E 2

B 120

D 12

4. (5 pts) Simplify.

$$1\frac{2}{3} \div \frac{11}{6}$$

A $\frac{55}{18}$

C $\frac{4}{11}$

E $\frac{11}{6}$

B $\frac{10}{11}$

D $\frac{11}{9}$



5. (5 pts) Calculate the difference, rounding your answer to the nearest hundredth.

$$5.63 - 3.125$$

A 2.505

C 2.5

E 2.52

B 2.515

D 2.51

6. (5 pts) Solve.

$$\frac{2}{5} = \frac{6}{x}$$

A $x = 5$

C $x = 9$

E $x = 15$

B $x = 6$

D $x = 10$



7. (5 pts) Simplify.

$$\sqrt{12} + 3\sqrt{12} + \sqrt{25}$$

A $4\sqrt{12} + 5$

C $18\sqrt{3}$

E $8\sqrt{3} + 5$

B $4\sqrt{12} + \sqrt{25}$

D $9\sqrt{12}$

8. (5 pts) Simplify the expression and express the answer in scientific notation.

$$\frac{(0.04 \times 10^4)(300,000)}{(15,000)(0.00002)}$$

A 1.6×10^{-5}

C 3×10^7

E 3.2×10^{-2}

B 4×10^8

D 1.8×100



9. (15 pts) Simplify.

$$|-5 - 8|$$

10. (15 pts) Find the prime factorization of 136.



11. (15 pts) Convert 2 yards into inches.

12. (15 pts) Simplify.

$$\frac{(x^{2a})^3}{x^{a-1}}$$

