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## PRACTICE FINAL EXAM Part 2

Short Answer: solve the questions on the line provided. (1 mark each)

1. A decimal number, to the nearest tenth, between $\frac{2}{3}$ and $\frac{5}{6}$ is
2. The value of the expression $-3-15 \div(-0.9)$ is
3. Determine the value of $\sqrt{73}$.
4. Julie is building garden in the shape of a square. The area of the garden is $32 \mathrm{~cm}^{2}$. Find the side length of the garden.
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5. Write the following as repeated multiplication $5^{8} \div\left(2^{4}\right)\left(3^{4}\right)$
$\qquad$
6. What is the surface area of a rectangular prism with a side length of 5 cm and a width of 4 cm , and a height of 2 cm ?
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7. The value of $6^{0}$ is
$\qquad$
8. Solve by combining like terms. Write your answer in simplest form.

$$
(3 s-3)+(2+2 s)-(4-4 s)+(5 s-5)
$$

10. The product of $(-3.2 x)\left(6.3 x^{2}\right)$ in simplified form is
11. The value of $x$ in the equation $\frac{6}{7} x=\frac{4}{5}$ is
12. Solve: $5 x+5=x-15$
13. Using the information in the given diagram below, the height of the actual building is


Written Response: SHOW YOUR WORK for full marks. Marks as shown. Simplify: (2 marks)
16. $(-2 x)(7 x)$
17. $\frac{4 m^{2}-16 m}{8 m}$

Solve the following. Show all steps. Circle your final answer.
( 2 marks each)

$$
\text { 20. } 6 x=\frac{-3}{4}
$$

21. $-b+3.9=2.4+4 b$
22. $2(6-2 x)=-3(4+x)$
23. $\frac{x-1}{3}=\frac{2}{7}$
24. Ben and Jerry are the top scorers on their lacrosse team. In one season, Ben scored one fifth of their teams goals and Jerry scored three sevenths. If Ben and Jerry scored a total of 44 goals, how many goals did their entire team score? (2 marks)
25. The perimeter of a square is 16.8 cm . If the side length of the square is represented by the expression $(x-5) c m$, then what is the value of $x$ ? ( 2 marks)
26. Victoria is helping her mother plan a lunch for the people attending a workshop. They have been given a budget of $\$ 1000$ to cover all costs. The cost of food for lunch is $\$ 16.25$ per person and beverages are $\$ 6.50$ per person. There is also a $\$ 50$ charge to rent the room.
a. Write and solve an equation that shows the the number of people that they can give lunch to and stay within the budget.
(2 marks)
27. The triangles below are similar, find the missing side length RE and BT to the nearest tenths. (2 marks) $\Delta R E D \sim \Delta B A T$

