Name:_____

Simplify each expression and choose the correct answer.

1. $\sqrt{54}$

    ○ A. $18\sqrt{3}$

    ○ B. $3\sqrt{6}$

    ○ C. $9\sqrt{6}$

    ○ D. $6\sqrt{3}$

2. $\sqrt{720}$

    ○ A. $144\sqrt{5}$

    ○ B. $12\sqrt{5}$

    ○ C. $120\sqrt{3}$

    ○ D. $10\sqrt{3}$

3. $\sqrt{192}$

    ○ A. $8\sqrt{3}$

    ○ B. $64\sqrt{3}$

    ○ C. $6\sqrt{3}$

    ○ D. $48\sqrt{3}$

4. $\sqrt{125}$

    ○ A. $25\sqrt{5}$

    ○ B. $5\sqrt{5}$

    ○ C. $5\sqrt{3}$

    ○ D. $15\sqrt{3}$

5. $\sqrt{864}$

    ○ A. $12\sqrt{3}$

    ○ B. $144\sqrt{3}$

    ○ C. $12\sqrt{6}$

    ○ D. $144\sqrt{6}$

6. $\sqrt{72}$

    ○ A. $6\sqrt{2}$

    ○ B. $2\sqrt{6}$

    ○ C. $36\sqrt{2}$

    ○ D. $12\sqrt{6}$

7. $3\sqrt{67x}$

Which value of x makes the expression above equivalent to $21\sqrt{67}$?

- A. 49
- B. 441
- C. 147
- D. 7

8. $\sqrt{145x}$

The expression above should be further simplified for which value of x?

- A. 61
- B. 94
- C. 3
- D. 235

9. $\sqrt{41x}$

Which value of x makes the expression above equivalent to $22\sqrt{41}$?

- A. 44
- B. 484
- C. 22
- D. 902

10. $6\sqrt{23x}$

Which value of x makes the expression above equivalent to $24\sqrt{23}$?

- A. 16
- B. 96
- C. 4
- D. 576