Name_____ Date _____

9.1 Puzzle Time

What Do You Say When You Get Off A Boat?

Write the letter of each answer in the box containing the exercise number.

Simplify the expression.

1. $\sqrt{28}$

2. $-\sqrt{75}$

3. $\sqrt{63x^3}$

4. $-\sqrt{\dfrac{36x^2}{121}}$

5. $\sqrt{\dfrac{x^5}{64}}$

6. $\sqrt[3]{-54}$

7. $-\sqrt[3]{\dfrac{125x^2}{343y^3}}$

8. $\sqrt[3]{\dfrac{729}{-1000x^3y^6}}$

9. $\dfrac{6}{\sqrt{11}}$

10. $\sqrt{\dfrac{8}{28}}$

11. $\dfrac{\sqrt{12}}{\sqrt{5x^3}}$

12. $\dfrac{2}{\sqrt{13}+1}$

13. $\dfrac{\sqrt{7}}{9+\sqrt{7}}$

14. $\sqrt{2} - 3\sqrt{17} + 7\sqrt{2}$

15. $8\sqrt{24} - 6\sqrt{54}$

16. $\left(\sqrt{10} + \sqrt{40}\right)\left(\sqrt{50} - \sqrt{18}\right)$

17. The length of the board for a shelf is $\left(\sqrt{27} + \sqrt{3}\right)$ feet. The width of the board is $2\sqrt{2}$ feet. Find the area of the board.

Answers

U. $-\dfrac{5\sqrt[3]{x^2}}{7y}$

R. $3x\sqrt{7x}$

N. $\dfrac{x^2\sqrt{x}}{8}$

M. $-\dfrac{9}{10xy^2}$

T. $8\sqrt{6}$

Y. $\dfrac{6\sqrt{11}}{11}$

C. $\dfrac{-1+\sqrt{13}}{6}$

H. $-2\sqrt{6}$

O. $-5\sqrt{3}$

E. $2\sqrt{7}$

H. $12\sqrt{5}$

A. $\dfrac{-7+9\sqrt{7}}{74}$

F. $8\sqrt{2} - 3\sqrt{17}$

R. $-3\sqrt[3]{2}$

K. $\dfrac{\sqrt{14}}{7}$

Y. $\dfrac{2\sqrt{15x}}{5x^2}$

U. $-\dfrac{6x}{11}$

17	15	13	5	10		11	2	7		14	1	6	3	9		8	4	12	16