Algebra II

Blizzard Bag #1

Learning Target: Multiply and simplify radical expressions with 100% accuracy.

Instructions: On the following page complete the radical expressions to decode the names of young animals. Turn your completed worksheet in to Mrs. Stiteler during your class period when we return to school.

Making Practice Fun 87 Name _____

Radical Expressions—Multiplying, Simplifying

FACTS ABOUT YOUNG ANIMALS

1. Work each exercise.
2. Find the code letter for the correct answer.
3. Write the code letter in each blank having that exercise number.

Exercises

Multiply and simplify.

1. $\sqrt{5}\sqrt{15} = 5\sqrt{3}$ R
2. $\sqrt{8}\sqrt{3}$
3. $\sqrt{7}\sqrt{14}$
4. $\sqrt{11}\sqrt{11}$
5. $\sqrt{10}\sqrt{2}$
6. $\sqrt{6}\sqrt{8}$
7. $\sqrt{12}\sqrt{8}$
8. $\sqrt{18}\sqrt{3}$
9. $\sqrt{22}\sqrt{\frac{11}{2}}$
10. $\sqrt{5a}\sqrt{10b}$
11. $\sqrt{7a}\sqrt{7a}$
12. $\sqrt{3x^2y}\sqrt{2y}$
13. $\sqrt{12ab^2}\sqrt{3ab}$
14. $\sqrt{14x^3y^4}\sqrt{21x}$
15. $\sqrt{30a}\sqrt{6ab}$
16. $\sqrt{3}\sqrt{25}$
17. $\sqrt{14xy^2}\sqrt{21x^2y}$
18. $\sqrt{8ab}\sqrt{8a}$
19. $\sqrt{12}\sqrt{6}$
20. $\sqrt{26x^3y^5}\sqrt{13x^2y}$
21. $\sqrt{x^2}\sqrt{6y^2}$
22. $\sqrt{x-1}\sqrt{2x-2}$
23. $\sqrt{75ab}\sqrt{5a}$
24. $\sqrt{3x-9}\sqrt{6x-18}$

What is the name of a young . . .

kangaroo? $\overline{13}\ \overline{5}\ \overline{12}\ \overline{6}$

hare? $\overline{15}\ \overline{21}\ \overline{9}\ \overline{21}\ \overset{R}{\overline{1}}\ \overline{12}\ \overline{8}$

salmon? $\overline{10}\ \overline{2}\ \overline{16}\ \overline{16}$

pigeon? $\overline{20}\ \overline{14}\ \overline{7}\ \overline{2}\ \overline{18}$

swan? $\overline{23}\ \overline{6}\ \overline{3}\ \overline{11}\ \overline{21}\ \overline{8}$

quail? $\overline{23}\ \overline{22}\ \overline{12}\ \overline{21}\ \overline{10}\ \overline{12}\ \overline{16}$

eel? $\overline{12}\ \overline{15}\ \overline{4}\ \overline{21}\ \overline{16}$

harp seal? $\overline{19}\ \overline{22}\ \overline{17}\ \overline{8}\ \overline{12}\ \overline{23}\ \overline{5}\ \overline{2}\ \overline{8}$

squirrel? $\overline{20}\ \overline{10}\ \overline{5}\ \overline{23}\ \overline{24}$

beaver? $\overline{24}\ \overline{17}\ \overline{8}$

hawk? $\overline{21}\ \overline{6}\ \overline{2}\ \overline{20}$

Code Letter	Simplified Answer
A	$2\sqrt{6}$
B	$8a\sqrt{b}$
C	$5a\sqrt{15b}$
D	$6ab\sqrt{5}$
E	$xy\sqrt{6}$
F	$3\sqrt{5}$
G	$7\sqrt{2}$
H	$(x-1)\sqrt{2}$
I	$7xy\sqrt{6xy}$
J	$6ab\sqrt{b}$
K	$3(x-3)\sqrt{2}$
L	$6a\sqrt{5b}$
M	$13x^2y\sqrt{2xy}$
N	$7a$
O	$2\sqrt{5}$
P	$5\sqrt{2ab}$
Q	$7x^2y^2\sqrt{6}$
R	$5\sqrt{3}$
S	$13x^2y^3\sqrt{2x}$
T	$3\sqrt{6}$
U	$4\sqrt{6}$
V	11
W	$6\sqrt{2}$
Y	$4\sqrt{3}$