

Name the Whale

Simplify each of the following math expressions using the order of operations. Then write the corresponding letter on the line in front of the expression. The letters will spell out the solution to the riddle when read from bottom to top.

Skills:

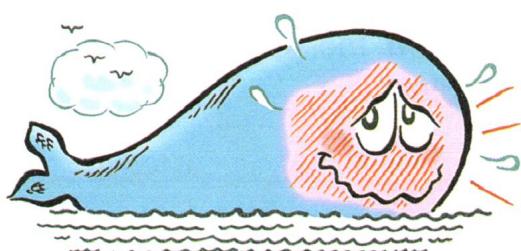
Using Order
of Operations
to Solve
Equations

What is black and white and red all over?

Order of Operations

1. Do whatever is inside the parentheses first.
2. Next, do multiplication and/or division from left to right.
3. The last step is to do addition and/or subtraction from left to right.

27	A	14	M
0	B	5	N
22	C	17	O
54	D	19	R
24	E	15	S



$15 + 6 \times 2 =$
 $20 + 10 \div 5 =$
 $9 + 2 \times 5 =$
 $14 + 1 \times 3 =$

 $18 \times 6 \div 2 =$
 $6 \times (3 + 1) =$
 $16 - 4 \div 4 =$
 $7 + 4 \times 2 =$
 $33 - 3 \times 2 =$
 $5 \times 2 + 9 =$
 $26 - (9 - 2) =$
 $8 \times 4 - 5 =$
 $15 \times (3 - 3) =$
 $19 - (10 - 5) =$
 $26 - 6 \div 3 =$

 $12 \div 3 + 1 =$
 $30 - 9 \div 3 =$

Deep Blue Sea

Skills:Understanding
Order of
Operations

What's the Order?

1. Timothy solved the following two problems and says that they have the same answer.

a) $5 \times 4 - 3 + 2 =$ b) $5 \times 4 - (3 + 2) =$

$20 - 5 = 15$

$20 - 5 = 15$

Do you agree with Timothy? Write him a note stating if you agree or not and why. Include in your note the correct answer for each problem.

2. Francine saw the following problem and was confused about the parentheses.

$$7 + (5 \times 3) - 8$$

She understood the order of operations, but was asked the question, "Are the parentheses necessary in this problem? If the parentheses were gone, wouldn't you solve the problem the same way?" Please write a note to Francine stating if you agree or not with her thinking and why. Include in your note the correct answer for the problem.

3. Drew saw the following problem and was confused about where to start.

$$90 - (5 + 4 \times 3) + 30$$

He knew that he should start inside the parentheses, but didn't know what he should do first, $5 + 4$ or 4×3 . Write a note to Drew stating the steps he should follow to solve the problem. Include in your note the correct solution and answer for the problem.

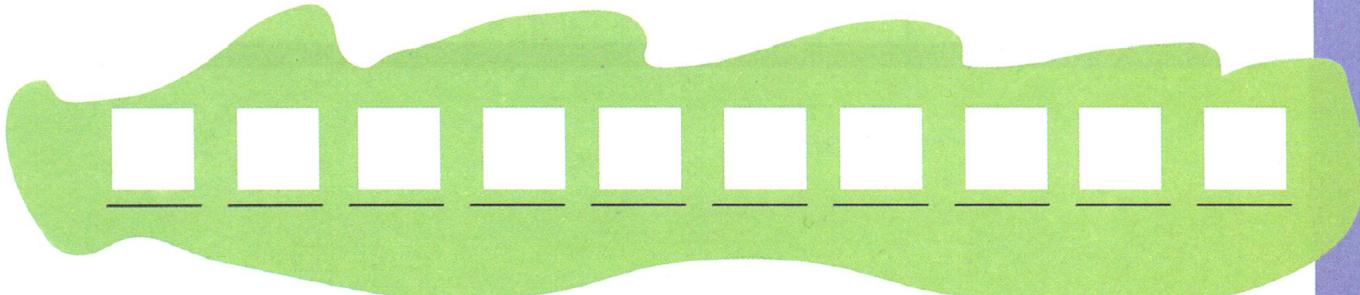
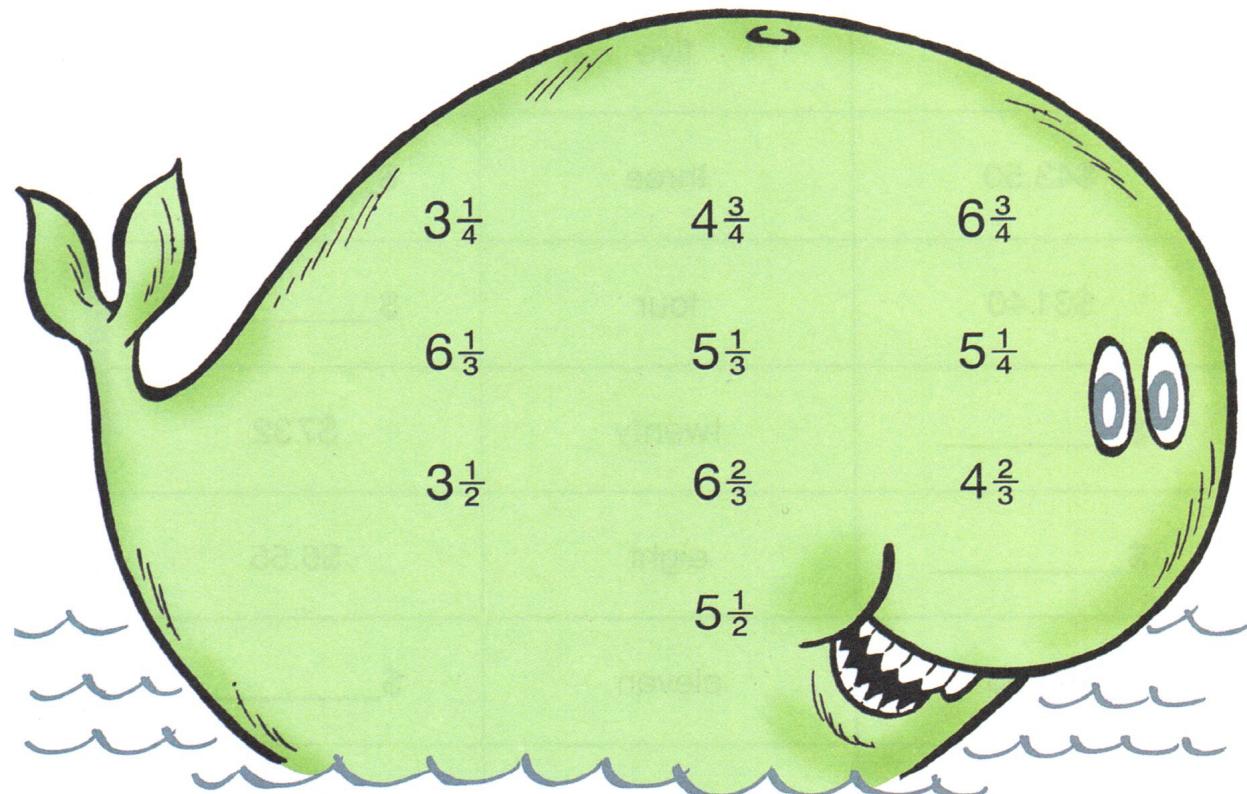
A Whale of a Job

Use the number line to help order the following ten numbers from smallest to largest. First, place each point on the number line and label it. After all the points have been plotted on the number line, list the numbers in order from smallest to largest.

Skills:

Locating Points
on a Number
Line

Ordering
Fractions



Deep Blue Sea

Skills:

Multiplying
and Dividing
Decimal
Numbers

Completing a
Chart

Whale-Watching Trip

Each group agreed to share the cost of different whale-watching trips equally. How much did each person pay?

Fill in the missing numbers.

Total Cost	Number of People in the Group	Each Person in the Group Paid
\$18.75	five	\$_____
\$43.50	three	\$_____
\$31.40	four	\$_____
\$_____	twenty	\$7.32
\$_____	eight	\$6.55
\$93.50	eleven	\$_____
\$_____	fifteen	\$90.00
\$_____	six	\$14.25
\$144.00	twelve	\$_____

How Deep Is the Ocean?

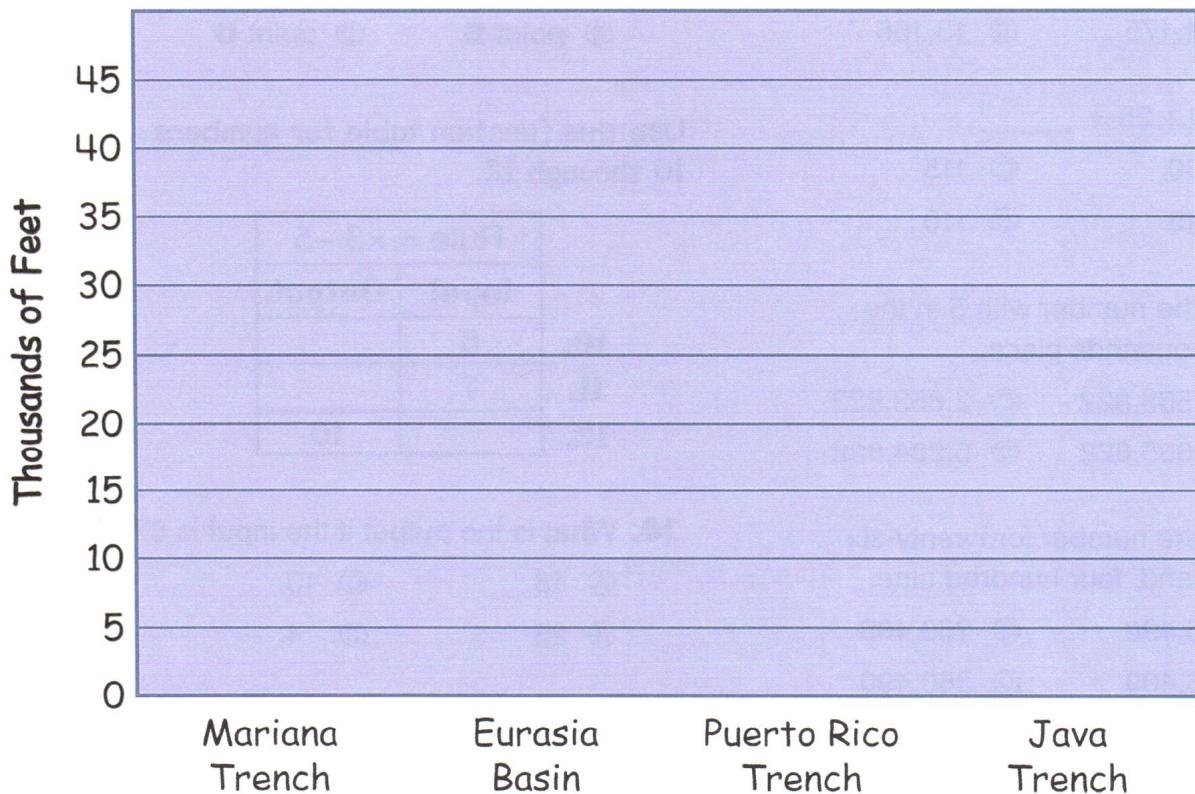
The chart below contains the deepest depths of four of the Earth's oceans. The numbers have been rounded to the nearest thousand. Use the information to complete the bar graph.

Skills:

Interpreting a Chart

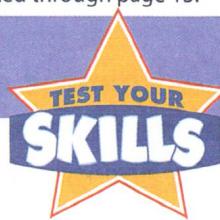
Constructing a Bar Graph

Pacific Ocean	Mariana Trench	36,000 feet deep
Arctic Ocean	Eurasia Basin	18,000 feet deep
Atlantic Ocean	Puerto Rico Trench	28,000 feet deep
Indian Ocean	Java Trench	25,000 feet deep



How much deeper is the deepest part of the Pacific Ocean than the deepest part of the Indian Ocean?

Deep Blue Sea



Fill in the circle next to the correct answer.

1. $4,268 + 8,230 = \underline{\hspace{2cm}}$

- (A) 12,984 (C) 12,498
(B) 12,849 (D) 12,598

2. $2,631 - 1,320 = \underline{\hspace{2cm}}$

- (A) 1,321 (C) 1,311
(B) 1,211 (D) 1,221

3. $425 \times 31 = \underline{\hspace{2cm}}$

- (A) 13,175 (C) 13,075
(B) 14,175 (D) 13,165

4. $2,750 \div 25 = \underline{\hspace{2cm}}$

- (A) 100 (C) 115
(B) 125 (D) 110

5. Find the number with 5 in the ten thousands place.

- (A) 2,563,822 (C) 2,653,822
(B) 2,635,822 (D) 5,234,822

6. Find the number for twenty-six thousand, four hundred nine.

- (A) 26,490 (C) 260,409
(B) 26,409 (D) 260,490

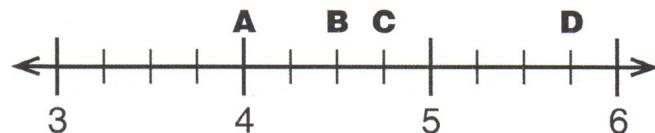
7. What is the expanded form of 3,287?

- (A) $3,000 + 200 + 70 + 8$
(B) $300 + 200 + 8 + 7$
(C) $3,000 + 200 + 80 + 70$
(D) $3,000 + 200 + 80 + 7$

8. $7 \times (5 + 2) = \underline{\hspace{2cm}}$

- (A) 7 (C) 49
(B) 37 (D) 56

9. Where does $4\frac{3}{4}$ belong on the number line?



- (A) point A (C) point C
(B) point B (D) point D

Use this function table for numbers 10 through 12.

Rule = $\times 3 - 5$	
Input	Output
10.	6
11.	1
12.	10

10. What is the output if the input is 6?

- (A) 18 (C) 13
(B) 23 (D) 4

11. What is the output if the input is 1?

- (A) 3 (C) 8
(B) 2 (D) -2

12. What is the input if the output is 10?

- (A) 5 (C) 15
(B) 10 (D) 20