Pirate Factors: Captain's Treasure Hunt Adventure

Math | Grade 4 | Pirates Theme

Help Captain Redbeard and his pirate crew solve factor problems to unlock hidden treasure and navigate treacherous seas!

NAME _____ DATE _____ SCORE _____ / 8

1

Captain Redbeard discovered a treasure chest containing 12 gold doubloons. He wants to divide them equally among his pirate crew with no coins left over. List all the factors of 12 to show how many different ways he can split the treasure.

2

Pirate Polly is arranging cannonballs into rectangular formations on the ship's deck. She has 18 cannonballs to arrange. What are all the possible factor pairs she can make to create different rectangular formations?

3

Blackbeard's crew caught 24 barrels of sea rum in a raid. He needs to stack them equally on 8 different ship compartments with no barrels left over. Is 8 a factor of 24? Explain by showing if 24 divides evenly by 8.

4

Three pirate captains want to split 15 pieces of eight equally amongst themselves with nothing left over. Is 3 a factor of 15? Show your work.

5

Pirate Pete found a map showing that 20 pieces of buried treasure are hidden around an island. List all the factors of 20 to determine how many different groups of pirates could equally share the treasure hunt locations.

6

Captain Scarlet is organizing a pirate festival with 16 decorative flags. She wants to hang them in equal rows with no flags left unpaired. What are all the factor pairs of 16?

7

A pirate ship's crew consists of 14 sailors. The captain wants to form equal teams for different tasks with no sailor left out. List all the factors of 14 to show the possible team sizes.

8

Pirate Jenny discovered 30 ancient coins in a mysterious cave. She wants to create equal piles for each of her 5 crew members. Is 5 a factor of 30? Show how many coins each crew member gets.

Answer Key

Math | Grade 4 | For Parents and Teachers

1

Captain Redbeard discovered a treasure chest containing 12 gold doubloons. He wants to divide them equally among his pirate crew with no coins left over. List all the factors of 12 to show how many different ways he can split the treasure.

ANSWER

1, 2, 3, 4, 6, 12

2

Pirate Polly is arranging cannonballs into rectangular formations on the ship's deck. She has 18 cannonballs to arrange. What are all the possible factor pairs she can make to create different rectangular formations?

ANSWER

1×18, 2×9, 3×6 (or 1 and 18, 2 and 9, 3 and 6)

3

Blackbeard's crew caught 24 barrels of sea rum in a raid. He needs to stack them equally on 8 different ship compartments with no barrels left over. Is 8 a factor of 24? Explain by showing if 24 divides evenly by 8.

ANSWER

Yes, 8 is a factor of 24 because 24 ÷ 8 = 3 with no remainder

4

Three pirate captains want to split 15 pieces of eight equally amongst themselves with nothing left over. Is 3 a factor of 15? Show your work.

ANSWER

Yes, 3 is a factor of 15 because 15 ÷ 3 = 5 with no remainder

5

Pirate Pete found a map showing that 20 pieces of buried treasure are hidden around an island. List all the factors of 20 to determine how many different groups of pirates could equally share the treasure hunt locations.

ANSWER

1, 2, 4, 5, 10, 20

6

Captain Scarlet is organizing a pirate festival with 16 decorative flags. She wants to hang them in equal rows with no flags left unpaired. What are all the factor pairs of 16?

ANSWER

1×16, 2×8, 4×4 (or 1 and 16, 2 and 8, 4 and 4)

7

A pirate ship's crew consists of 14 sailors. The captain wants to form equal teams for different tasks with no sailor left out. List all the factors of 14 to show the possible team sizes.

ANSWER

1, 2, 7, 14

8

Pirate Jenny discovered 30 ancient coins in a mysterious cave. She wants to create equal piles for each of her 5 crew members. Is 5 a factor of 30? Show how many coins each crew member gets.

ANSWER

Yes, 5 is a factor of 30 because 30 ÷ 5 = 6 coins per crew member