



The Case of the Midnight Galloper

Grade 6 math · Rounding, Fractions of a number, Multiplication, Word problems, Division · Reading level grades 5-6

Detective: _____ Date: _____

The grand trophy for the upcoming Championship Derby has vanished from the tack room! A mysterious rider was seen galloping away under the moonlight. We must follow the horseshoe prints and discover who took it.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Midnight Thief is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	RIDING STYLE	SPECIAL GEAR	REIN HAND	UNDER-HELMET HAIR	FAVORITE HORSE TREAT
Calamity Jane	silent trotting	golden stirrups	right handed rein grip	short crop	crunchy carrots
Equestrian Emma	trick riding	golden stirrups	left handed rein grip	messy bun	peppermint treats
Galloping Grace	trick riding	golden stirrups	left handed rein grip	short crop	crunchy carrots
Maverick Max	gate opening	silver horseshoes	right handed rein grip	short crop	crunchy carrots
Trainer Tom	gate opening	golden stirrups	right handed rein grip	braided ponytail	crunchy carrots
Stirrup Stella	gate opening	glowing halter	right handed rein grip	short crop	peppermint treats
Pony Penny	lasso tossing	glowing halter	right handed rein grip	short crop	crunchy carrots
Bella Bronco	gate opening	glowing halter	right handed rein grip	short crop	crunchy carrots
Saddler Sally	lasso tossing	glowing halter	right handed rein grip	braided ponytail	sweet apples
Jockey Jack	lasso tossing	feathered saddle	left handed rein grip	short crop	peppermint treats
Hoofbeat Hannah	lasso tossing	feathered saddle	right handed rein grip	messy bun	crunchy carrots
Sheriff Mustang	lasso tossing	feathered saddle	right handed rein grip	short crop	crunchy carrots
Bridle Betty	trick riding	feathered saddle	left handed rein grip	short crop	sweet apples
Paddock Pete	lasso tossing	braided reins	right handed rein grip	braided ponytail	crunchy carrots
Rider Roy	high jumping	golden stirrups	right handed rein grip	short crop	peppermint treats
Baroness Buckskin	trick riding	silver horseshoes	left handed rein grip	braided ponytail	peppermint treats
Spur Spencer	gate opening	silver horseshoes	right handed rein grip	braided ponytail	crunchy carrots
Tackroom Tim	trick riding	glowing halter	left handed rein grip	messy bun	sweet apples
Stablemaster Sam	high jumping	golden stirrups	right handed rein grip	braided ponytail	sweet apples
Canter Cody	silent trotting	glowing halter	left handed rein grip	short crop	sweet apples
Colt Carter	silent trotting	silver horseshoes	right handed rein grip	short crop	sweet apples

CLUE 1

The stable radar tracked the escaping rider's speed, but the old machine only displays speeds rounded to the nearest ten.

Solve each problem, then write its letter in every clue box that shows the same number.

9000 700 5000 900 90 70 70 4300 90 20 1300 110 5000 170 20 110 9000

700 4300 900 5000 4300 50 5000 4300 9000 700 5000 200 5000 1300 170 4300 1300 1300 70 5000

Round 9,334 to the nearest thousand $\rightarrow$ **T**

Round 170 to the nearest ten $\rightarrow$ **S**

Round 87 to the nearest ten $\rightarrow$

Round 1,257 to the nearest hundred $\rightarrow$ **D**

Round 16 to the nearest ten → **N**

Round 899 to the nearest hundred $\rightarrow$ **V**

Round 4,333 to the nearest hundred → **A**

Round 656 to the nearest hundred $\rightarrow$ **H**

Round 51 to the nearest ten → **F**

Round 5,374 to the nearest thousand → **E**

Round 113 to the nearest ten $\rightarrow$

Round 73 to the nearest ten $\rightarrow$ **L**

Round 208 to the nearest hundred $\rightarrow$ **R**

Scratch space:

CLUE 2 Fractions of a number

We found a torn map of the pasture trail. Only a fraction of the original trail markers are still standing to guide us.

Solve each problem, then write its letter in every clue box that shows the same number.

$3/5$ of $35 = \boxed{} \rightarrow \boxed{\text{T}}$

$$\frac{4}{5} \text{ of } 50 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$\frac{1}{5} \text{ of } 90 = \boxed{} \rightarrow \boxed{\text{H}}$$

3/6 of 46 = → **S**

4/8 of 6 = → **C**

$5/8$ of 56 = $\rightarrow$ **G**

$3/6$ of $18 = \boxed{} \rightarrow \mathbf{D}$

$$\frac{1}{5} \text{ of } 95 = \boxed{} \rightarrow \boxed{}$$

$7/8$ of 8 = $\rightarrow$ **U**

$$\frac{1}{2} \text{ of } 54 = \boxed{} \rightarrow \boxed{\text{R}}$$

$\frac{1}{3}$ of 48 = $\rightarrow$ **A**

$\frac{1}{2}$ of 40 = $\rightarrow$ **E**

$$\frac{1}{5} \text{ of } 190 = \boxed{} \rightarrow \boxed{\text{P}}$$

2/10 of 70 = → **N**

$2/4$ of 20 = $\rightarrow$

Scratch space:

CLUE 3
Multiplication facts (1-12)

To find where the suspect fled, we must count the rows of hay bales stacked up in the feeding barn.

Solve each problem, then write its letter in every clue box that shows the same number.

T																	
48	64	108	21	36	84	108	21	110	1	70	70	48	6	66	66	108	84

18	42	45	21	90	32	45	64	42	45	1	21	21	6	48	70		

$4 \times 12 = \square \rightarrow$

T

$9 \times 4 = \square \rightarrow$

I

$8 \times 8 = \square \rightarrow$

H

$1 \times 1 = \square \rightarrow$

A

$4 \times 8 = \square \rightarrow$

N

$7 \times 10 = \square \rightarrow$

S

$11 \times 10 = \square \rightarrow$

W

$7 \times 6 = \square \rightarrow$

Y

$11 \times 6 = \square \rightarrow$

P

$5 \times 9 = \square \rightarrow$

C

$12 \times 7 = \square \rightarrow$

D

$3 \times 7 = \square \rightarrow$

R

$10 \times 9 = \square \rightarrow$

U

$2 \times 3 = \square \rightarrow$

O

$3 \times 6 = \square \rightarrow$

B

$9 \times 12 = \square \rightarrow$

E

Scratch space:

CLUE 4

Word problems

The deputy wrote down a puzzle about the missing grooming brushes in the tack room ledger.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of S hair turned up at the scene.

92 49 23 75 74 118 75 23 35

Stable hand found 5 buckets yesterday and 87 more today. How many buckets in all?

Answer: → S

Stable hand lined up 5 rows of 7 carrots. How many carrots in all?

Answer: → P

Stable hand found 35 horseshoes yesterday and 39 more today. How many horseshoes in all?

Answer: → T

Stable hand found 71 saddle blankets yesterday and 4 more today. How many saddle blankets in all?

Answer: → R

Stable hand lined up 7 rows of 7 grooming brushes. How many grooming brushes in all?

Answer: → H

Stable hand found 18 grooming brushes yesterday and 100 more today. How many grooming brushes in all?

Answer: → C

There were 56 saddle blankets. 33 were used up. How many saddle blankets are left?

Answer: → O

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We need to split the leftover apples evenly among the rescue ponies to see who gets the final clue.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$42 \div 7 = \boxed{}$

$132 \div 12 = \boxed{}$

$96 \div 8 = \boxed{}$

$8 \div 8 = \boxed{}$

$45 \div 5 = \boxed{}$

$70 \div 10 = \boxed{}$

$30 \div 6 = \boxed{}$

$12 \div 6 = \boxed{}$

$30 \div 10 = \boxed{}$

$72 \div 9 = \boxed{}$

$36 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain throws a perfect lasso, then pulls tight on braided reins.
2. The villain performs trick riding feats, then glows with a magic halter.
3. The villain unlatches the barn gates, then rests on a feathered saddle.
4. The villain leaps over the highest fences, then leaves silver horseshoe prints.
5. The villain trots silently through the dark, then glows with a magic halter.
6. The villain trots silently through the dark, then shines gold stirrups.
7. The villain leaps over the highest fences, then rests on a feathered saddle.
8. The villain performs trick riding feats, then leaves silver horseshoe prints.
9. The villain leaps over the highest fences, then glows with a magic halter.
10. The villain unlatches the barn gates, then glows with a magic halter.
11. The villain unlatches the barn gates, then leaves silver horseshoe prints.
12. The villain throws a perfect lasso, then glows with a magic halter.

Answer Key

The Case of the Midnight Galloper

Culprit: Bella Bronco

gate opening · glowing halter · right handed rein grip · short crop · crunchy carrots

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT HAVE A FEATHERED SADDLE"

Round 9,334 to the nearest thousand = 9000 (T) · Round 170 to the nearest ten = 170 (S) · Round 87 to the nearest ten = 90 (I) · Round 1,257 to the nearest hundred = 1300 (D) · Round 16 to the nearest ten = 20 (N) · Round 899 to the nearest hundred = 900 (V) · Round 4,333 to the nearest hundred = 4300 (A) · Round 656 to the nearest hundred = 700 (H) · Round 51 to the nearest ten = 50 (F) · Round 5,374 to the nearest thousand = 5000 (E) · Round 113 to the nearest ten = 110 (O) · Round 73 to the nearest ten = 70 (L) · Round 208 to the nearest hundred = 200 (R)

Clue 2 (Fractions of a number): "THE SUSPECT HOLDS REINS IN THE RIGHT HAND"

$\frac{3}{5}$ of 35 = 21 (T) · $\frac{4}{5}$ of 50 = 40 (L) · $\frac{1}{5}$ of 90 = 18 (H) · $\frac{3}{6}$ of 46 = 23 (S) · $\frac{4}{8}$ of 6 = 3 (C) · $\frac{5}{8}$ of 56 = 35 (G) · $\frac{3}{6}$ of 18 = 9 (D) · $\frac{1}{5}$ of 95 = 19 (I) · $\frac{7}{8}$ of 8 = 7 (U) · $\frac{1}{2}$ of 54 = 27 (R) · $\frac{1}{3}$ of 48 = 16 (A) · $\frac{1}{2}$ of 40 = 20 (E) · $\frac{1}{5}$ of 190 = 38 (P) · $\frac{2}{10}$ of 70 = 14 (N) · $\frac{2}{4}$ of 20 = 10 (O)

Clue 3 (Multiplication facts (1-12)): "THE RIDER WAS STOPPED BY CRUNCHY CARROTS"

$4 \times 12 = 48$ (T) · $9 \times 4 = 36$ (I) · $8 \times 8 = 64$ (H) · $1 \times 1 = 1$ (A) · $4 \times 8 = 32$ (N) · $7 \times 10 = 70$ (S) · $11 \times 10 = 110$ (W) · $7 \times 6 = 42$ (Y) · $11 \times 6 = 66$ (P) · $5 \times 9 = 45$ (C) · $12 \times 7 = 84$ (D) · $3 \times 7 = 21$ (R) · $10 \times 9 = 90$ (U) · $2 \times 3 = 6$ (O) · $3 \times 6 = 18$ (B) · $9 \times 12 = 108$ (E)

Clue 4 (Word problems): "SHORT CROP"

Stable hand found 5 buckets yesterday and 87 more today. How many buckets in all? = 92 (S) · Stable hand lined up 5 rows of 7 carrots. How many carrots in all? = 35 (P) · Stable hand found 35 horseshoes yesterday and 39 more today. How many horseshoes in all? = 74 (T) · Stable hand found 71 saddle blankets yesterday and 4 more today. How many saddle blankets in all? = 75 (R) · Stable hand lined up 7 rows of 7 grooming brushes. How many grooming brushes in all? = 49 (H) · Stable hand found 18 grooming brushes yesterday and 100 more today. How many grooming brushes in all? = 118 (C) · There were 56 saddle blankets. 33 were used up. How many saddle blankets are left? = 23 (O)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Bella Bronco

$42 \div 7 = 6$ · $132 \div 12 = 11$ · $96 \div 8 = 12$ · $8 \div 8 = 1$ · $45 \div 5 = 9$ · $70 \div 10 = 7$ · $30 \div 6 = 5$ · $12 \div 6 = 2$ · $30 \div 10 = 3$ · $72 \div 9 = 8$ · $36 \div 9 = 4$