



The Great Barn Escape

Grade 2 math · Place value, Word problems, Addition, Subtraction, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

A sneaky pony got out of the pasture. The pony ate all the blue prize ribbons! We must find the pony before the big show starts.

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 sneaky pony is _____

Possible suspects

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

NAME	SPECIAL HORSE TRICK	SHOW GEAR	STRAP BRAND	MANE HAIR COLOR	FAVORITE SNACK
Seabiscuit	Fast Gallop	Red Halter	Right Brand	Fluffy White Mane	Peppermint Drops
Daisy	Apple Snatching	Glitter Bridle	Right Brand	Fluffy White Mane	Peppermint Drops
Starlight	Apple Snatching	Glitter Bridle	Right Brand	Fluffy White Mane	Sweet Apples
Cocoa	Gate Opening	Glitter Bridle	Left Brand	Long Brown Mane	Crunchy Carrots
Secretariat	Gate Opening	Golden Horseshoes	Right Brand	Fluffy White Mane	Sweet Apples
Spirit	Fast Gallop	Golden Horseshoes	Left Brand	Braided Black Mane	Crunchy Carrots
Pegasus	High Jump	Red Halter	Right Brand	Braided Black Mane	Crunchy Carrots
Clover	High Jump	Red Halter	Right Brand	Fluffy White Mane	Sweet Apples
Trigger	High Jump	Silver Stirrups	Right Brand	Long Brown Mane	Peppermint Drops
Patch	High Jump	Glitter Bridle	Left Brand	Long Brown Mane	Sweet Apples
Black Beauty	Apple Snatching	Glitter Bridle	Right Brand	Long Brown Mane	Sweet Apples
Shadow	Gate Opening	Silver Stirrups	Right Brand	Braided Black Mane	Crunchy Carrots
Peanut	Apple Snatching	Silver Stirrups	Left Brand	Fluffy White Mane	Crunchy Carrots
Silver	Apple Snatching	Red Halter	Left Brand	Long Brown Mane	Crunchy Carrots
Pip	Soft Stepping	Blue Blanket	Right Brand	Long Brown Mane	Peppermint Drops
Sunny	Soft Stepping	Silver Stirrups	Right Brand	Fluffy White Mane	Peppermint Drops
Champion	Apple Snatching	Silver Stirrups	Right Brand	Fluffy White Mane	Peppermint Drops
Comet	Soft Stepping	Golden Horseshoes	Left Brand	Fluffy White Mane	Peppermint Drops
Zippy	Soft Stepping	Blue Blanket	Right Brand	Fluffy White Mane	Peppermint Drops
Ginger	High Jump	Glitter Bridle	Right Brand	Braided Black Mane	Crunchy Carrots
Waffles	Soft Stepping	Blue Blanket	Left Brand	Long Brown Mane	Peppermint Drops

CLUE 1 Place value

We found a note in the feed bin. We must count the carrots to read it.

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

T																			
19	67	93	41	70	96	72	16	70	93	36	96	70	19	98	93	76	44	76	
			T	T															
64	51	29	19	19	93	44	86	44	29	16	51	93							

What number has 1 ten and 9 ones?

 → **T**

What number has 5 tens and 1 one?

 → **L**

What number has 7 tens and 6 ones?

 → **A**

What number has 7 tens and 2 ones?

 → **Y**

What number has 9 tens and 3 ones?

 → **E**

What number has 7 tens and 0 ones?

 → **O**

What number has 9 tens and 6 ones?

 → **N**

What number has 4 tens and 4 ones?

 → **R**

What number has 9 tens and 8 ones?

 → **W**

What number has 1 ten and 6 ones?

 → **D**

What number has 6 tens and 7 ones?

 → **H**

What number has 2 tens and 9 ones?

 → **I**

What number has 3 tens and 6 ones?

 → **S**

What number has 8 tens and 6 ones?

 → **B**

What number has 6 tens and 4 ones?

 → **G**

What number has 4 tens and 1 one?

 → **P**

Scratch space:

CLUE 2

Word problems

The pony left tracks near the tack room. Let us look at the tens and ones blocks to count the footprints.

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

A witness saw the villain was

R						R		N	D
11	7	12	36	10	34	11	28		

.

Barn Manager Bob found 2 brushes yesterday and 9 more today. How many brushes in all?

Answer: → **R**

Barn Manager Bob found 4 apples yesterday and 30 more today. How many apples in all?

Answer: → **B**

There were 34 brushes. 6 were used up. How many brushes are left?

Answer: → **A**

There were 12 ribbons. 5 were used up. How many ribbons are left?

Answer: → **I**

Barn Manager Bob lined up 6 rows of 6 brushes. How many brushes in all?

Answer: → **H**

Barn Manager Bob found 7 carrots yesterday and 3 more today. How many carrots in all?

Answer: → **T**

Barn Manager Bob lined up 3 rows of 4 brushes. How many brushes in all?

Answer: → **G**

Scratch space:

CLUE 3 Addition

We must count all the brushes in the blue buckets to find the next clue.

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

T																			
59	53	68	64	30	52	86	96	47	68	24	24	64	59	52	30	93	52	75	
30	33	30	30	33	75	36	68	86	59	38	75	52	30	64					

$37 + 22 = \square \rightarrow$ T	$11 + 19 = \square \rightarrow$ P	$54 + 39 = \square \rightarrow$ F
$27 + 11 = \square \rightarrow$ D	$20 + 44 = \square \rightarrow$ S	$38 + 30 = \square \rightarrow$ I
$27 + 48 = \square \rightarrow$ R	$37 + 15 = \square \rightarrow$ O	$58 + 38 = \square \rightarrow$ Y
$52 + 34 = \square \rightarrow$ N	$33 + 14 = \square \rightarrow$ W	$17 + 16 = \square \rightarrow$ E
$12 + 12 = \square \rightarrow$ L	$33 + 20 = \square \rightarrow$ H	$10 + 26 = \square \rightarrow$ M

Scratch space:

CLUE 4

Subtraction

Someone ate some sugar cubes from the jar. Subtract the missing cubes to unlock this box.

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

W																W					
66	30	47	19	74	85	28	61	47	32	74	47	47	81	66	41	73	62	30			
41	61	73	25	19	85	62	41	30	32	61	62	17	41								

$105 - 39 = \square \rightarrow \boxed{W}$

$73 - 32 = \square \rightarrow \boxed{H}$

$67 - 37 = \square \rightarrow \boxed{E}$

$40 - 15 = \square \rightarrow \boxed{R}$

$64 - 3 = \square \rightarrow \boxed{A}$

$83 - 9 = \square \rightarrow \boxed{U}$

$92 - 7 = \square \rightarrow \boxed{N}$

$41 - 24 = \square \rightarrow \boxed{C}$

$69 - 37 = \square \rightarrow \boxed{L}$

$92 - 11 = \square \rightarrow \boxed{Y}$

$65 - 37 = \square \rightarrow \boxed{D}$

$69 - 22 = \square \rightarrow \boxed{F}$

$88 - 15 = \square \rightarrow \boxed{I}$

$69 - 7 = \square \rightarrow \boxed{T}$

$50 - 31 = \square \rightarrow \boxed{O}$

Scratch space:

CLUE 5**Missing addends - the last clue**

The stable needs ten fresh hay bales. Solve how many more we must find to open the gate.

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:

$8 + \underline{\quad} = 18$

$5 + \underline{\quad} = 10$

$1 + \underline{\quad} = 13$

$3 + \underline{\quad} = 11$

$7 + \underline{\quad} = 13$

$7 + \underline{\quad} = 16$

$3 + \underline{\quad} = 14$

$1 + \underline{\quad} = 8$

$3 + \underline{\quad} = 6$

$4 + \underline{\quad} = 8$

$6 + \underline{\quad} = 7$

Step 2 - cross out the sentence with each answer:

1. The villain snatched a sweet red apple from the bucket, then swished a warm blue blanket.
2. The villain snatched a sweet red apple from the bucket, then showed off shiny silver stirrups.
3. The villain snatched a sweet red apple from the bucket, then tossed a bright red halter in the air.
4. The villain opened the complex metal gate latch, then showed off shiny silver stirrups.
5. The villain galloped super fast down the dirt track, then tossed a bright red halter in the air.
6. The villain opened the complex metal gate latch, then tossed a bright red halter in the air.
7. The villain galloped super fast down the dirt track, then shook a glitter bridle in the sun.
8. The villain jumped over the high stable fence, then showed off shiny silver stirrups.
9. The villain jumped over the high stable fence, then swished a warm blue blanket.
10. The villain walked quietly past the sleeping dog, then showed off shiny silver stirrups.
11. The villain galloped super fast down the dirt track, then stamped gold shoes in the soft dirt.
12. The villain walked quietly past the sleeping dog, then swished a warm blue blanket.

Answer Key

The Great Barn Escape

Culprit: Champion

Apple Snatching · Silver Stirrups · Right Brand · Fluffy White Mane · Peppermint Drops

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE PONY DOES NOT WEAR A GLITTER BRIDLE"

What number has 1 ten and 9 ones? = 19 (T) · What number has 5 tens and 1 one? = 51 (L) · What number has 7 tens and 6 ones? = 76 (A) · What number has 7 tens and 2 ones? = 72 (Y) · What number has 9 tens and 3 ones? = 93 (E) · What number has 7 tens and 0 ones? = 70 (O) · What number has 9 tens and 6 ones? = 96 (N) · What number has 4 tens and 4 ones? = 44 (R) · What number has 9 tens and 8 ones? = 98 (W) · What number has 1 ten and 6 ones? = 16 (D) · What number has 6 tens and 7 ones? = 67 (H) · What number has 2 tens and 9 ones? = 29 (I) · What number has 3 tens and 6 ones? = 36 (S) · What number has 8 tens and 6 ones? = 86 (B) · What number has 6 tens and 4 ones? = 64 (G) · What number has 4 tens and 1 one? = 41 (P)

Clue 2 (Word problems): "RIGHT BRAND"

Barn Manager Bob found 2 brushes yesterday and 9 more today. How many brushes in all? = 11 (R) · Barn Manager Bob found 4 apples yesterday and 30 more today. How many apples in all? = 34 (B) · There were 34 brushes. 6 were used up. How many brushes are left? = 28 (A) · There were 12 ribbons. 5 were used up. How many ribbons are left? = 7 (I) · Barn Manager Bob lined up 6 rows of 6 brushes. How many brushes in all? = 36 (H) · Barn Manager Bob found 7 carrots yesterday and 3 more today. How many carrots in all? = 10 (T) · Barn Manager Bob lined up 3 rows of 4 brushes. How many brushes in all? = 12 (G)

Clue 3 (Addition): "THIS PONY WILL STOP FOR PEPPERMINT DROPS"

$37 + 22 = 59$ (T) · $11 + 19 = 30$ (P) · $54 + 39 = 93$ (F) · $27 + 11 = 38$ (D) · $20 + 44 = 64$ (S) · $38 + 30 = 68$ (I) · $27 + 48 = 75$ (R) · $37 + 15 = 52$ (O) · $58 + 38 = 96$ (Y) · $52 + 34 = 86$ (N) · $33 + 14 = 47$ (W) · $17 + 16 = 33$ (E) · $12 + 12 = 24$ (L) · $33 + 20 = 53$ (H) · $10 + 26 = 36$ (M)

Clue 4 (Subtraction): "WE FOUND A FLUFFY WHITE HAIR ON THE LATCH"

$105 - 39 = 66$ (W) · $73 - 32 = 41$ (H) · $67 - 37 = 30$ (E) · $40 - 15 = 25$ (R) · $64 - 3 = 61$ (A) · $83 - 9 = 74$ (U) · $92 - 7 = 85$ (N) · $41 - 24 = 17$ (C) · $69 - 37 = 32$ (L) · $92 - 11 = 81$ (Y) · $65 - 37 = 28$ (D) · $69 - 22 = 47$ (F) · $88 - 15 = 73$ (I) · $69 - 7 = 62$ (T) · $50 - 31 = 19$ (O)

Clue 5 (Missing addends): surviving statement is box 2 → Champion

$8 + \underline{\quad} = 18 = 10$ · $5 + \underline{\quad} = 10 = 5$ · $1 + \underline{\quad} = 13 = 12$ · $3 + \underline{\quad} = 11 = 8$ · $7 + \underline{\quad} = 13 = 6$ · $7 + \underline{\quad} = 16 = 9$ · $3 + \underline{\quad} = 14 = 11$ · $1 + \underline{\quad} = 8 = 7$ · $3 + \underline{\quad} = 6 = 3$ · $4 + \underline{\quad} = 8 = 4$ · $6 + \underline{\quad} = 7 = 1$