



Case of the Demolition Derby Bandit

Grade 4 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

On the biggest night of the year, the Derby Champion vanished right after the final smash-up. All that was left was a busted fence and a trail of fat tire tracks. Grab your clipboard, junior detective, and figure out which monster truck driver took off with our champ.

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 Demolition Bandit is _____

Possible suspects

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

NAME	SIGNATURE MOVE	PIT TRICK	DRIVER	TRUCK COLOR	WEAK SPOT
Lulu Lugnut	Mud Bog Master	Ramp Builder	boy driver	red	flat tires
Rex Roadkill	Wheelie Walker	Engine Roar	girl driver	red	muddy ramps
Buck Crankshaft	Car Crusher	Engine Roar	girl driver	red	low fuel
Cleo Crusher	Car Crusher	Nitro Boost	boy driver	blue	flat tires
Boomer Boltz	Car Crusher	Ramp Builder	girl driver	red	muddy ramps
Wanda Wheelie	Big Air Jumper	Tire Shredder	boy driver	blue	flat tires
Spike Axleton	Wheelie Walker	Nitro Boost	boy driver	red	flat tires
Tank Turner	Mud Bog Master	Engine Roar	boy driver	blue	low fuel
Ace Ironside	Big Air Jumper	Nitro Boost	boy driver	green	muddy ramps
Daisy Dynamo	Mud Bog Master	Tire Shredder	girl driver	red	flat tires
Greta Grinder	Mud Bog Master	Smoke Screen	boy driver	blue	flat tires
Chip Chassis	Wheelie Walker	Tire Shredder	girl driver	green	low fuel
Mabel Mudslinger	Wheelie Walker	Smoke Screen	boy driver	blue	flat tires
Max Mufflers	Donut Spinner	Nitro Boost	boy driver	blue	flat tires
Sadie Smasher	Car Crusher	Engine Roar	girl driver	red	muddy ramps
Tilly Torque	Mud Bog Master	Engine Roar	girl driver	blue	flat tires
Gus Gravel	Car Crusher	Smoke Screen	boy driver	blue	muddy ramps
Penny Piston	Mud Bog Master	Tire Shredder	boy driver	red	muddy ramps
Rosie Revs	Donut Spinner	Engine Roar	girl driver	red	low fuel
Moe Monster	Big Air Jumper	Smoke Screen	girl driver	green	flat tires
Vera Vortex	Donut Spinner	Engine Roar	girl driver	green	muddy ramps

CLUE 1

Rounding

The arena scoreboard only flashes rounded numbers, so round the bandit's lap time to see which pit trick the truck could not pull off.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
470	20	200	280	3100	70	70	3000	3100	7000	300000	3000	7000	7000	20000	470	

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50000	20	47000	200	28000	470	3100	47000	200	50000

Round 473 to the nearest ten **T** Round 47,480 to the nearest thousand **R** Round 47,959 to the nearest ten thousand **S**

Round 3,478 to the nearest thousand **A** Round 282 to the nearest ten **V** Round 225 to the nearest hundred **E**

Round 7,172 to the nearest thousand **N** Round 27,750 to the nearest thousand **D** Round 3,133 to the nearest hundred **I**

Round 66 to the nearest ten **L** Round 19,922 to the nearest ten thousand **O** Round 326,878 to the nearest hundred thousand **C**

Round 24 to the nearest ten **H**

Scratch space:

CLUE 2 Addition

Counting up all the smashed cars in the pile tells you how many witnesses saw the driver, so add the tallies to learn if it was a boy or a girl.

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

<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2637	4866	5846	8258	8615	3063	7005	7005	7005	2637	4866	2637	7610	8073	5331	2731	4692	5846	7770
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8258	7781	3063	4866	7781	3063	3063	4707											

1131 + 1506 =	<input type="checkbox"/>	<input type="checkbox"/> A	2806 + 5452 =	<input type="checkbox"/>	<input type="checkbox"/> T	3415 + 5200 =	<input type="checkbox"/>	<input type="checkbox"/> N
3127 + 2719 =	<input type="checkbox"/>	<input type="checkbox"/> I	3442 + 3563 =	<input type="checkbox"/>	<input type="checkbox"/> S	4209 + 3864 =	<input type="checkbox"/>	<input type="checkbox"/> O
3832 + 3949 =	<input type="checkbox"/>	<input type="checkbox"/> H	1516 + 1547 =	<input type="checkbox"/>	<input type="checkbox"/> E	2501 + 2830 =	<input type="checkbox"/>	<input type="checkbox"/> Y
4110 + 3500 =	<input type="checkbox"/>	<input type="checkbox"/> B	1082 + 1649 =	<input type="checkbox"/>	<input type="checkbox"/> G	2230 + 2477 =	<input type="checkbox"/>	<input type="checkbox"/> L
1560 + 3306 =	<input type="checkbox"/>	<input type="checkbox"/> W	1881 + 2811 =	<input type="checkbox"/>	<input type="checkbox"/> R	3739 + 4031 =	<input type="checkbox"/>	<input type="checkbox"/> P

Scratch space:

CLUE 3

Subtraction

The bandit started with a full row of barrels and knocked some over, so subtract to find out which weak spot the guards used to slow it down.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G									G								
3562	5959	5696	6276	8328	6318	7770	8515	5959	3562	8709	6173	8001	5696	4850	2250	8001	3591

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					G						
1634	8515	1634	1634	5344	8509	3562	5696	6173	5344	6276	6590

5850 - 2288 =	<input type="checkbox"/>	G	9286 - 3010 =	<input type="checkbox"/>	R	4984 - 134 =	<input type="checkbox"/>	C
9646 - 1876 =	<input type="checkbox"/>	F	8856 - 2897 =	<input type="checkbox"/>	U	9631 - 1303 =	<input type="checkbox"/>	D
9458 - 749 =	<input type="checkbox"/>	H	4774 - 1183 =	<input type="checkbox"/>	Y	9082 - 3738 =	<input type="checkbox"/>	I
7666 - 1493 =	<input type="checkbox"/>	T	8589 - 74 =	<input type="checkbox"/>	O	4304 - 2054 =	<input type="checkbox"/>	K
8794 - 285 =	<input type="checkbox"/>	N	11550 - 3549 =	<input type="checkbox"/>	B	8844 - 2254 =	<input type="checkbox"/>	E
8059 - 2363 =	<input type="checkbox"/>	A	3247 - 1613 =	<input type="checkbox"/>	P	10441 - 4123 =	<input type="checkbox"/>	S

Scratch space:

CLUE 4**Multiplication facts (1-12)**

Spilled paint chips were stuck on the fence in equal rows, so multiply the rows to match the bandit's truck color.

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

<input type="text" value="B"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
72	10	32	5	63	80	77	144	18	15	80	24	10	5	21	18	1	144	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18	121	5	21	5	144	50	5											

$8 \times 9 =$	<input type="text"/>	<input type="text" value="B"/>	$8 \times 10 =$	<input type="text"/>	<input type="text" value="A"/>	$8 \times 4 =$	<input type="text"/>	<input type="text" value="U"/>
$5 \times 10 =$	<input type="text"/>	<input type="text" value="C"/>	$7 \times 3 =$	<input type="text"/>	<input type="text" value="F"/>	$5 \times 1 =$	<input type="text"/>	<input type="text" value="E"/>
$5 \times 2 =$	<input type="text"/>	<input type="text" value="L"/>	$1 \times 1 =$	<input type="text"/>	<input type="text" value="O"/>	$7 \times 11 =$	<input type="text"/>	<input type="text" value="I"/>
$9 \times 2 =$	<input type="text"/>	<input type="text" value="T"/>	$8 \times 3 =$	<input type="text"/>	<input type="text" value="S"/>	$12 \times 12 =$	<input type="text"/>	<input type="text" value="N"/>
$9 \times 7 =$	<input type="text"/>	<input type="text" value="P"/>	$11 \times 11 =$	<input type="text"/>	<input type="text" value="H"/>	$5 \times 3 =$	<input type="text"/>	<input type="text" value="W"/>

Scratch space:

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

The crew split the leftover tire tracks into equal groups across the lot, so divide them to lock in the bandit's signature move.

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:

$12 \div 3 = \boxed{}$

$72 \div 6 = \boxed{}$

$40 \div 8 = \boxed{}$

$66 \div 11 = \boxed{}$

$12 \div 4 = \boxed{}$

$45 \div 5 = \boxed{}$

$110 \div 10 = \boxed{}$

$70 \div 7 = \boxed{}$

$7 \div 1 = \boxed{}$

$9 \div 9 = \boxed{}$

$12 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain rides up on two big wheels, then shreds the spare tires.
2. The villain rolls over the parked cars, then shreds the spare tires.
3. The villain rolls over the parked cars, then blows a cloud of smoke.
4. The villain churns through the mud pit, then blows a cloud of smoke.
5. The villain rolls over the parked cars, then blasts away on nitro.
6. The villain rolls over the parked cars, then stacks a hidden ramp.
7. The villain spins wild donuts in the dirt, then stacks a hidden ramp.
8. The villain rides up on two big wheels, then blows a cloud of smoke.
9. The villain rides up on two big wheels, then blasts away on nitro.
10. The villain soars off the dirt ramp, then roars the engine loud.
11. The villain soars off the dirt ramp, then stacks a hidden ramp.
12. The villain spins wild donuts in the dirt, then blasts away on nitro.

Answer Key

Case of the Demolition Derby Bandit

Culprit: Mabel Mudslinger

Wheelie Walker · Smoke Screen · boy driver · blue · flat tires

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT SHRED TIRES"

Round 473 to the nearest ten = 470 (T) · Round 47,480 to the nearest thousand = 47000 (R) · Round 47,959 to the nearest ten thousand = 50000 (S) · Round 3,478 to the nearest thousand = 3000 (A) · Round 282 to the nearest ten = 280 (V) · Round 225 to the nearest hundred = 200 (E) · Round 7,172 to the nearest thousand = 7000 (N) · Round 27,750 to the nearest thousand = 28000 (D) · Round 3,133 to the nearest hundred = 3100 (I) · Round 66 to the nearest ten = 70 (L) · Round 19,922 to the nearest ten thousand = 20000 (O) · Round 326,878 to the nearest hundred thousand = 300000 (C) · Round 24 to the nearest ten = 20 (H)

Clue 2 (Addition): "A WITNESS SAW A BOY GRIP THE WHEEL"

$1131 + 1506 = 2637$ (A) · $2806 + 5452 = 8258$ (T) · $3415 + 5200 = 8615$ (N) · $3127 + 2719 = 5846$ (I) · $3442 + 3563 = 7005$ (S) · $4209 + 3864 = 8073$ (O) · $3832 + 3949 = 7781$ (H) · $1516 + 1547 = 3063$ (E) · $2501 + 2830 = 5331$ (Y) · $4110 + 3500 = 7610$ (B) · $1082 + 1649 = 2731$ (G) · $2230 + 2477 = 4707$ (L) · $1560 + 3306 = 4866$ (W) · $1881 + 2811 = 4692$ (R) · $3739 + 4031 = 7770$ (P)

Clue 3 (Subtraction): "GUARDS FOUGHT BACK BY POPPING A TIRE"

$5850 - 2288 = 3562$ (G) · $9286 - 3010 = 6276$ (R) · $4984 - 134 = 4850$ (C) · $9646 - 1876 = 7770$ (F) · $8856 - 2897 = 5959$ (U) · $9631 - 1303 = 8328$ (D) · $9458 - 749 = 8709$ (H) · $4774 - 1183 = 3591$ (Y) · $9082 - 3738 = 5344$ (I) · $7666 - 1493 = 6173$ (T) · $8589 - 74 = 8515$ (O) · $4304 - 2054 = 2250$ (K) · $8794 - 285 = 8509$ (N) · $11550 - 3549 = 8001$ (B) · $8844 - 2254 = 6590$ (E) · $8059 - 2363 = 5696$ (A) · $3247 - 1613 = 1634$ (P) · $10441 - 4123 = 6318$ (S)

Clue 4 (Multiplication facts (1-12)): "BLUE PAINT WAS LEFT ON THE FENCE"

$8 \times 9 = 72$ (B) · $8 \times 10 = 80$ (A) · $8 \times 4 = 32$ (U) · $5 \times 10 = 50$ (C) · $7 \times 3 = 21$ (F) · $5 \times 1 = 5$ (E) · $5 \times 2 = 10$ (L) · $1 \times 1 = 1$ (O) · $7 \times 11 = 77$ (I) · $9 \times 2 = 18$ (T) · $8 \times 3 = 24$ (S) · $12 \times 12 = 144$ (N) · $9 \times 7 = 63$ (P) · $11 \times 11 = 121$ (H) · $5 \times 3 = 15$ (W)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Mabel Mudslinger

$12 \div 3 = 4$ · $72 \div 6 = 12$ · $40 \div 8 = 5$ · $66 \div 11 = 6$ · $12 \div 4 = 3$ · $45 \div 5 = 9$ · $110 \div 10 = 11$ · $70 \div 7 = 10$ · $7 \div 1 = 7$ · $9 \div 9 = 1$ · $12 \div 6 = 2$