Unicorn Race: Linear Equations

Time: 15 min Total: 11 marks

LIN-1B

NAME or INITIALS (BLOCK CAPITALS, one letter per box)

ANSWER KEY — not for students, do not scan

ANSWERS — write each final answer in its box. Only these boxes are marked.

1	$x = 5$	2	$x = 12$	3	$x = -4$
4	$x = -5$	5	9	6	$r = \sqrt{\frac{A}{\pi}}$

1 Solve for x: **1 mark**

$$3x + 5 = 20$$

$x = 5$

answer in box 1 above

2 Solve for x: **1 mark**

$$\frac{x}{4} - 2 = 1$$

$x = 12$

answer in box 2 above

3 Solve for x: **2 marks**

$$2(x - 3) = 5x + 6$$

$x = -4$

answer in box 3 above

4 Solve for x: **3 marks**

$$\frac{2x + 1}{3} = \frac{x - 1}{2}$$

$x = -5$

answer in box 4 above

5 The perimeter of a rectangle is 46 cm. Its length is 5 cm more than its width. Find the width of the rectangle, in cm. **2 marks**

9

answer in box 5 above

6 Make r the subject of the formula: **2 marks**

$$A = \pi r^2$$

$r = \sqrt{\frac{A}{\pi}}$

answer in box 6 above

Work in the space under each question. Only the answer boxes above are marked.