- **9.** On the number line, the value of $(-3) \times 3$ lies on right hand side of
 - (a) 10
- (b) -4
- (c) 0

- (d) 9
- **10.** The value of $5 \div (-1)$ does not lie between
 - (a) 0 and -10
- (b) 0 and 10
- (c) -4 and -15 (d) -6 and 6
- 11. Water level in a well was 20m below ground level. During rainy season, rain water collected in different water tanks was drained

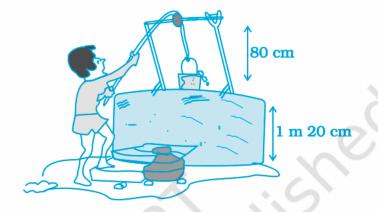
Integers 9

15-04-2018

MATHEMATICS

into the well and the water level rises 5 m above the previous level. The wall of the well is 1m 20 cm high and a pulley is fixed at a height of 80 cm. Raghu wants to draw water from the well. The minimum length of the rope that he can use is

- (a) 17 m
- (b) 18 m
- (c) 96 m
- (d) 97 m



- 24. In a Mathematics quiz, 30 prizes consisting of 1st and 2nd prizes only are to be given. 1st and 2nd prizes are worth ₹ 2000 and ₹ 1000, respectively. If the total prize money is ₹ 52,000 then show that:
 (a) If 1st prizes are x in number the number of 2nd prizes are _____.
 (b) The total value of prizes in terms of x are _____.
 - (d) The solution of the equation is _____.
 - (e) The number of 1st prizes are _____ and the number of 2nd prizes are _____.
- **25.** If z + 3 = 5, then z =______.
- **26.** ______ is the solution of the equation 3x 2 = 7. _____ is the solution of 3x + 10 = 7.

(c) The equation formed is ______.

60 .	(a)	What should be subtracted from $2x^3 - 3x^2y + 2xy^2 + 3y^3$ to get
		$x^3 - 2x^2y + 3xy^2 + 4y^3$?
	(b)	What should be subtracted from $-7mn + 2m^2 + 3n^2$ to get

 $m^2 + 2mn + n^2$?

- 82. Express the following numbers in standard form:
 (a) 76,47,000
 (b) 8,19,00,000
 (c) 5, 83,00,00,00,000
 (d) 24 billion
- 83. The speed of light in vaccum is 3×10^8 m/s. Sunlight takes about 8 minutes to reach the earth. Express distance of Sun from Earth in standard form.