

Year 7 NAPLAN Numeracy Practice Test Solutions (Non-Calculator)

About this resource:

This Year 7 NAPLAN Numeracy Practice Test is designed to simulate a full ACARA NAPLAN test, not only in length but also question difficulty and variety, crafted by our expert tutors. Work your way through a mixture of multiple choice and short-answer questions calculator free and check your responses with the included fully-worked solutions.

About the author:

Ayman Ahsan – 4th Year Dental Student at La Trobe University



Ayman graduated VCE in 2021 with an ATAR of 98.10, achieving a 45 raw score in General Mathematics and 40+ raw all around. He is currently pursuing Dentistry at La Trobe University and **has been tutoring for 8+ years**. He is known for his kind and patient nature and ability to create a learning environment where students feel confident to ask questions and improve.

Q	Answer	How to work it out
1	C (8)	A hexagonal prism has 2 hexagonal faces + 6 rectangular faces = 8 faces.
2	D (216.4)	$168 + 47 = 215$ and $0.5 + 0.9 = 1.4$, so the total is 216.4.
3	B (\$1.25)	The drink and sandwich together cost $\$6.95 + \$11.20 = \$18.15$ Then $\$19.40 - \$18.15 = \$1.25$.
4	C	The row of 4 with one square above and one below folds into a cube. A (2×3 block), B (staircase) and D (5 in a row) all overlap or leave a face missing.
5	Martin	Column C, row 4.
6	D (75%)	6 out of 8 sections are black: $6/8 = 3/4 = 75\%$.
7	D (increase of 16 °C)	From -9 °C up to 0 °C is 9 °C , then 0 °C to 7 °C is 7 °C ; $9 + 7 = 16\text{ °C}$ increase.
8	A (100×3)	$98 \times 3 + 6 = 294 + 6 = 300$, and $100 \times 3 = 300$.
9	C	Every face shows 1, 2, 3, 4, 5 or 6, so rolling a number less than 7 is certain (probability 1).

Q	Answer	How to work it out
10	B (7)	Work backwards: $16 + 5 = 21$, then $21 \div 3 = 7$. Check: $7 \times 3 - 5 = 16$.
11	B (22)	Stage 1 uses 4 sticks and each extra square adds 3 sticks: $4 + 3 \times 6 = 22$.
12	A (5:30 pm)	$1\frac{3}{4}$ hours after 3:15 pm is 5:00 pm. Another $\frac{1}{2}$ hour takes her to 5:30 pm. (Total travel time = $2\frac{1}{4}$ hours.)
13	C (25%)	$20 - 15 = 5$ GB unused; $5/20 = 1/4 = 25\%$.
14	C	Turning design C through 180° maps every shaded square onto another shaded square.
15	D (7.5 cups)	Water : syrup = 3 : 2, so water = $5 \times 3 \div 2 = 7.5$ cups.
16	A (1:00 pm)	Melbourne is 3 hours ahead of Perth, so 10:00 am + 3 hours = 1:00 pm.
17	15	If Ari has a stickers, Bo has $2a$ and Cleo has $3a$. $a + 2a + 3a = 6a = 90$, so $a = 15$.
18	180	Motorbikes: $720 \div 4 = 180$, so there are 540 cars. Red cars = $540 \div 3 = 180$.
19	B (10)	The book lies on a line of symmetry, so the star has the same number of points on each side. The visible half shows 4 whole points plus half a point at the top and half a point at the bottom, which is 5 points per half: $5 \times 2 = 10$.
20	2	$2.8 \text{ kg} = 2800 \text{ g}$ and $2800 \div 560 = 5$, so $5 \times 400 \text{ mL} = 2000 \text{ mL} = 2$ litres.
21	27	Flour left = 2 bags – $\frac{1}{3}$ of a bag = $\frac{5}{3}$ of a bag = 45 kg, so one bag = $45 \times 3 \div 5 = 27 \text{ kg}$.
22	C (22 pounds)	Read up from 10 on the Kilograms axis to the line, then across: the value sits halfway between the 20 and 24 gridlines, which is 22 pounds.
23	48	Width w , length $3w$: $2(w + 3w) = 8w = 32$, so $w = 4 \text{ cm}$ and the length is 12 cm. Area = $4 \times 12 = 48 \text{ cm}^2$.
24	B (60 cm)	$300 \text{ m} \div 500 = 0.6 \text{ m} = 60 \text{ cm}$.
25	A ($\frac{3}{8}$)	$\frac{1}{4} = \frac{2}{8}$ and $\frac{1}{2} = \frac{4}{8}$, so the fraction halfway between them is $\frac{3}{8}$.
26	12	Apples take 8 of the 20 equal sectors and pears take 3, a difference of 5 sectors = 15 students, so 1 sector = 3 students. Oranges take 4 sectors: $4 \times 3 = 12$ students.
27	4.5	Perimeter = $2 \times (400 + 350) = 1500 \text{ m}$. Three strands: $3 \times 1500 = 4500 \text{ m} = 4.5 \text{ km}$.
28	B	The data has 132 twice, 135 three times, 138 twice, 140 once and 142 once.
29	324	Each number is 3 times the one before: 4, 12, 36, 108, so $108 \times 3 = 324$.
30	D ($45 + 8n$)	The \$45 joining fee is paid once and \$8 is paid for each of the n lessons.

Q	Answer	How to work it out
31	11	The factors of 143 are 1, 11, 13 and 143; the primes are 11 and 13. $11 + 2 = 13$ (prime) but $13 + 2 = 15$ (not prime), so Ben is 11.
32	15	A cube has 12 edges. Slicing off one corner keeps those 12 edges (three of them shorter) and adds the 3 edges of the new triangular face: $12 + 3 = 15$.