

Formulae (+, -, *, /)

Unit: Data Analysis and Representation (Google Sheets) - Student Practice Worksheet

Overview: Anaya typed =12×40 and pressed Enter. Google Sheets refused. She typed it again, harder, as if the keyboard were being stubborn. Pixel's fan sighed.

Practice Questions (30 Total)

Section A - Easy

Q1. Which sign multiplies in Google Sheets?



multiply is the star

- ☐ A. ×
- ☐ B. x
- ☐ C. *
- ☐ D. /

Q2. What does 'B2' inside a formula like =B2*C2 mean?

- ☐ A. the literal text B2
- ☐ B. the cell in column B, row 2
- ☐ C. the number 2
- ☐ D. a formula name

Q3. Which sign adds two numbers in a Sheets formula?

- ☐ A. +
- ☐ B. -
- ☐ C. *
- ☐ D. /

Q4. Which sign divides in Google Sheets?



divide is the slash

- ☐ A. /
- ☐ B. ÷
- ☐ C. *
- ☐ D. -

Q5. What is a 'cell reference' such as B2 or C3?

- ☐ A. a fixed number typed by hand
- ☐ B. the name of a sheet
- ☐ C. the address of a cell in a formula
- ☐ D. a chart type

Q6. Which sign subtracts in a Sheets formula?

- ☐ A. *
- ☐ B. -
- ☐ C. /
- ☐ D. +

Q7. Every formula must begin with...



formula starts here

- ☐ A. a number
- ☐ B. an equals sign
- ☐ C. a bracket
- ☐ D. a letter

Q8. Which part of Sheets shows the real formula inside the selected cell, not just its answer?

- ☐ A. the sidebar
- ☐ B. the cell itself
- ☐ C. the sheet tab

☐ D. the formula bar

Q9. Which of these formulas will Sheets actually accept for multiplying B2 and C2?

☐ A. =B2×C2

☐ B. =B2 x C2

☐ C. =B2*C2

☐ D. =B2xC2

Q10. Which of these is NOT one of the four operators Sheets understands in a formula?

☐ A. +

☐ B. -

☐ C. /

☐ D. ×

Section B - Medium

Q11. Which formula gives Ladoo's total money in D2, and what is the answer?

B2 12	*	C2 40
D2 = 480		

☐ A. =B2+C2, which is 52

☐ B. =B2/C2, which is 0.3

☐ C. =12×40, which is 480

☐ D. =B2*C2, which is 480

Q12. Which pair of cells does the formula =B3*C3 multiply, and what sweet is that?

☐ A. B2 and C2 — Ladoo's boxes and price

☐ B. B4 and C4 — Jalebi's boxes and price

☐ C. B3 and C3 — Barfi's boxes and price

☐ D. C3 and D3 — Barfi's price and total

Q13. What does =B2+B3+B4 give, and what does that number mean?

☐ A. 36 — the total boxes sold

☐ B. 1455 — the total money

☐ C. 125 — the prices added up

- ☐ D. 3 — the number of sweets

Q14. D3 holds $=B3*C3$ and D4 holds $=B4*C4$. What numbers appear in them?

450	525
-----	-----

- ☐ A. 450 and 450
- ☐ B. 405 and 525
- ☐ C. 450 and 525
- ☐ D. 500 and 450

Q15. If Anaya forgets the equals sign and types just $B2*C2$ into D2, what happens?

- ☐ A. D2 shows 480, because Sheets always calculates automatically
- ☐ B. D2 shows the text $B2*C2$ — no = sign means no formula
- ☐ C. D2 shows an error message
- ☐ D. D2 copies the value from B2

Q16. Anaya wants to check that D2 really holds 12×40 . Which formula, typed in a spare cell, finds the price of one box of Ladoo from its total?

- ☐ A. $=D2/B2$, which is 40
- ☐ B. $=D2*B2$, which is 5760
- ☐ C. $=B2/D2$, which is 0.025
- ☐ D. $=D2-B2$, which is 468

Q17. Anaya types $=B2+C2$ in cell D2 by mistake, instead of $=B2*C2$. What does D2 show, and why is it wrong?



- ☐ A. 480, because addition and multiplication give the same result here
- ☐ B. 52, because it adds the boxes and the price instead of multiplying them
- ☐ C. 480, because Sheets automatically corrects the operator
- ☐ D. an error, because you cannot add two different columns

Q18. Ms. Rao asks for a formula that finds how many more boxes of Jalebi sold than Barfi. Which formula and answer is correct?

- ☐ A. $=B4+B3$, which is 24
- ☐ B. $=B3-B4$, which is -6
- ☐ C. $=B4-B3$, which is 6
- ☐ D. $=B4*B3$, which is 135

Q19. Kabir types $=C3-C2$ in a spare cell using the original prices. What is the answer, and what does it tell him?

- ☐ A. 10 — Barfi costs Rs. 10 more per box than Ladoo
- ☐ B. 10 — Ladoo costs Rs. 10 more per box than Barfi
- ☐ C. 90 — the two prices added together
- ☐ D. -10 — Barfi costs Rs. 10 less per box than Ladoo

Q20. A new column E is added for a price-per-box check, using $=D2/B2$ in E2. If someone instead types $=B2/D2$ by mistake, what does the cell show and why is it wrong?

- ☐ A. 40, the correct price per box
- ☐ B. 480, the total money
- ☐ C. 12, the number of boxes
- ☐ D. 0.025 — the division is upside down

Section C - Challenge

Q21. Anaya types $=B2 \times C2$ in one cell and $=B2 * C2$ in another. What happens in each, and why?



- ☐ A. Both show 480, because Sheets accepts either sign for multiply
- ☐ B. $=B2 * C2$ shows 480 but $=B2 \times C2$ fails, because $\times$ is not one of Sheets' four operators
- ☐ C. $=B2 \times C2$ shows 480 but $=B2 * C2$ fails, because the star is reserved for another use
- ☐ D. Both fail, because neither cell starts with a proper multiplication sign

Q22. Kabir argues that since $=B2 * C2$ and $=C2 * B2$ both give 480, the order of cell references in a multiply formula never matters. Is he right, and why?

- ☐ A. No — Sheets always calculates left to right, so order always changes the answer
- ☐ B. Yes — a spreadsheet always multiplies before it looks at what order cells are written
- ☐ C. He's right for multiply, but the same swap would change subtraction or division, like C3-C2 versus C2-C3
- ☐ D. No — $=C2*B2$ actually gives 400, because Sheets reads the first cell as the answer

Q23. Anaya adds a fourth sweet, Mysore Pak, in row 5: 6 boxes at Rs. 60 each. She copies the pattern from D2 and types $=B5*C5$ in D5. What is the new grand total of column D for all four sweets, and which single formula finds it fastest?

- ☐ A. $=D2+D3+D4$, which is 1455 — the total before Mysore Pak was added
- ☐ B. $=D2+D3+D4+D5+D5$, which is 2175
- ☐ C. $=D2+D3+D4+D5$, which is 1815
- ☐ D. $=B2+B3+B4+B5$, which is 42

Q24. Barfi's price in C3 changes from 50 to 45. Anaya's D3 holds $=B3*C3$; Kabir's spare cell holds $=9*50$. What happens to each cell, and what is the new grand total of column D?

$=B3*C3$ follows

$=9*50$ stays

- ☐ A. D3 becomes 405 and is correct; Kabir's cell still shows 450 and is now wrong; new total is 1410
- ☐ B. D3 stays 450 and is now wrong; Kabir's cell becomes 405 and is correct; new total is 1410
- ☐ C. Both cells become 405; new grand total is 1380
- ☐ D. Both cells stay at 450, because neither formula updates automatically; total stays 1455

Q25. Someone suggests replacing every formula in column D with just the typed numbers 480, 450 and 525, now that the totals are known, to make the sheet load faster. Ms. Rao disagrees. What is the strongest reason she gives?

- ☐ A. Typed numbers are always wrong, so they should never appear in a spreadsheet
- ☐ B. Formulas are required by Google Sheets and typed numbers are not allowed in cells
- ☐ C. It would make no real difference, because the numbers are correct either way
- ☐ D. If a box count or price is edited later, typed numbers freeze wrong while formulas update

Q26. Ms. Rao asks Anaya to find the average price per box across the three original sweets, without a special AVERAGE function. Which formula and answer is correct?

- ☐ A. $=(C2+C3+C4)$, which is 125
- ☐ B. $=(C2+C3+C4)/2$, which is 62.5
- ☐ C. $=(C2+C3+C4)/3$, which is about 41.67
- ☐ D. $=(D2+D3+D4)/3$, which is 485

Q27. Column D already holds 480, 450 and 525. Which formula finds the grand total of column D, and what is the answer?



- ☐ A. $=D2+D3+D4$, which is 1455
- ☐ B. $=D2+D3+D4$, which is 1445
- ☐ C. $=B2+B3+B4$, which is 36
- ☐ D. $=SUM(D2:D3)$, which is 930

Q28. Anaya wants a single formula that shows how much more money Jalebi earned than Ladoo, using the Total column. Which formula and reasoning is correct?

- ☐ A. $=D4+D2$, which is 1005 — the combined earnings of both sweets
- ☐ B. $=B4-B2$, which is 3 — the difference in boxes sold, not money
- ☐ C. $=D2-D4$, which is -45 — a negative number, so Sheets cannot show it
- ☐ D. $=D4-D2$, which is 45 — Jalebi earned Rs. 45 more than Ladoo

Q29. Mysore Pak sells 6 boxes. Its price in C5 is corrected from Rs. 60 to Rs. 55, and D5 holds $=B5*C5$. What is the new value of D5, and by how much did it fall from the original Rs. 60 price?

- ☐ A. 330, a fall of Rs. 5
- ☐ B. 360, no change (wrong)
- ☐ C. 300, a fall of Rs. 60
- ☐ D. 330, a fall of Rs. 30

Q30. Two students compute the grand total of column D differently. One uses $=D2+D3+D4$ and gets 1455. A third student uses $=D2+D3+D4+D2$ by mistake. What total does the third student get, and what is the error?

- ☐ A. 1455, because Sheets ignores repeated cell references
- ☐ B. 1935, because D2 (Ladoo's total) was added in twice by mistake
- ☐ C. 1455, because the extra +D2 cancels out with subtraction elsewhere

- ☐ **D.** 2415, because every value in the formula was doubled

Answer Key

Q1: (C) (c) The star. Option (a) is the sign from your maths book, and it is the one almost everyone tries first — but Sheets does not understand it, because it is not a keyboard key.

Q2: (B) (b) It points at the cell in column B, row 2. Option (a) is the trap: B2 is not text or a label, it is an address — Sheets goes and looks at whatever number currently sits there.

Q3: (A) (a) The plus sign. It is the one operator that looks exactly like the maths-book version, so it never causes the trouble that $\times$ and $\div$ do.

Q4: (A) (a) The slash. The $\div$ in (b) is the maths-book sign again; like $\times$, it is not on the keyboard and Sheets will not accept it.

Q5: (C) (c) It is the address of a cell, used inside a formula. Option (a) describes the opposite idea — a typed number is exactly what a cell reference is not, because it never updates.

Q6: (B) (b) The minus sign. Like plus, it matches the maths-book sign exactly, so there is no keyboard trap here the way there is with multiply and divide.

Q7: (B) (b) an equals sign. Starting with a number, as in (a), just types a number into the cell — Sheets only works something out when it sees the equals sign first.

Q8: (D) (d) The formula bar. Option (b), the cell itself, is the trap — the cell only ever displays the worked-out answer, never the formula that produced it.

Q9: (C) (c) $=B2*C2$. Options (a), (b) and (d) all try to use a letter x or the maths-book $\times$ where the star belongs — Sheets only recognises the star as multiply.

Q10: (D) (d) $\times$. It looks like the natural multiply sign from a maths book, but Sheets only accepts the four keyboard operators, and $\times$ is not one of them — use $*$ instead.

Q11: (D) (d) $=B2*C2$, which gives 480. Option (c) is the clever trap: the number 480 is right, but the $\times$ sign is not accepted by Sheets, so that cell would never produce an answer at all.

Q12: (C) (c) B3 and C3, Barfi's row. Row 3 in this sheet always means Barfi — row 2 is Ladoo and row 4 is Jalebi, so matching the row number to the sweet is the whole trick.

Q13: (A) (a) 36, the total boxes sold, from $12 + 9 + 15$. Option (c) 125 is the trap for anyone who adds column C instead of column B — $40 + 50 + 35$ — so always check which letter the formula names.

Q14: (C) (c) 450 and 525, from 9×50 and 15×35 . Option (b) uses 405, which is what D3 would show only after Barfi's price dropped to 45 — right sum, wrong price.

Q15: (B) (b) D2 shows the plain text $B2*C2$. Without the leading $=$, Sheets never treats what follows as something to work out — it is stored exactly as typed, letters and star included.

Q16: (A) (a) $=D2/B2$, which is 40. Option (c) flips the division upside down — boxes divided by the total — and lands on a tiny fraction instead of a sensible price.

Q17: (B) (b) 52, because $12 + 40 = 52$, not 12×40 . Sheets does exactly what the operator says — it never guesses that you meant a different sign, which is why (a) and (c) are both wrong.

Q18: (C) (c) $=B4-B3$, which is 6, from $15 - 9$. Option (b) puts the cells the wrong way round, so it answers "how many fewer" as a negative number instead of the positive gap that was asked for.

Q19: (A) (a) 10, and Barfi costs Rs. 10 more per box, from 50 – 40. Option (b) gets the direction backwards — the formula is C3 minus C2, Barfi minus Ladoo, not the other way round.

Q20: (D) (d) 0.025, because boxes divided by the total is the wrong way round. The correct check is total divided by boxes, D2/B2, which is what gives the sensible answer of 40 in option (a).

Q21: (B) (b) The star cell works and shows 480; the $\times$ cell fails, because $\times$ is a printed maths symbol that Sheets does not recognise as an operator, even though the intended sum is identical.

Q22: (C) (c) He is right, but only for multiply and add. Swap the same cells in a subtract or divide formula and the answer really does change — C3-C2 and C2-C3 are opposites, not equal.

Q23: (C) (c) =D2+D3+D4+D5, which is 1815, from 480 + 450 + 525 + 360. Option (a) forgets to include the new row entirely, so it quietly reports last week's total instead of today's.

Q24: (A) (a) D3 updates to 405 because it points at C3; Kabir's typed =9*50 cannot see the price change and stays wrong at 450. The new grand total is 480 + 405 + 525 = 1410.

Q25: (D) (d) A typed number cannot react to a later change, so it silently goes wrong the moment a price is edited — while a formula recalculates itself. That risk outweighs any speed gain.

Q26: (C) (c) =(C2+C3+C4)/3, about 41.67, because an average divides the sum by how many prices there are — three. Option (a) stops after adding, which gives a total, not an average.

Q27: (A) (a) =D2+D3+D4, which is 1455, from 480 + 450 + 525. Option (c) uses the right idea of adding three cells but names column B by mistake, giving the box count instead of the money.

Q28: (D) (d) =D4-D2, which is 45. Option (c) uses the right idea but the wrong order — Sheets can show a negative number perfectly well, it just answers "how much less" instead.

Q29: (D) (d) 330, a fall of Rs. 30. D5 was $6 \times 60 = 360$ before, and is now $6 \times 55 = 330$, a drop of 30 — because the formula points at C5, it recalculates the moment the price changes.

Q30: (B) (b) 1935, because D2 appears twice in the formula, so Ladoo's Rs. 480 is counted twice: $480 + 450 + 525 + 480 = 1935$. Sheets adds exactly what a formula names, repeats included.

You've got this! Keep learning and shining! - Ruchi Math Coaching