# Printable Wide-Ruled Loose-Leaf Paper: Layout, Margins, and Punch Holes

Complete worked example / separate answer key

A planned sheet uses a baseline spacing of 8.5 millimeters and a margin line 1.25 inches from the left edge. The punch holes are centered 0.5 inch from the left edge. Convert the margin distance to millimeters using 1 inch equals 25.4 millimeters, and state the gap between the hole center line and the margin line in millimeters.

Answer: The margin line is 1.25 times 25.4 equals 31.75 millimeters from the left edge. The hole center line is 0.5 times 25.4 equals 12.7 millimeters from the left edge. The gap is 31.75 minus 12.7 equals 19.05 millimeters. These values are hypothetical examples until measured on a test print.

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Original tasks 1, 2, 3 / complete keys

Task 1

A test sheet has baselines at 10, 18.5, 27, and 35.5 millimeters from the top ruled line. Are the spacings equal? Show the differences.

Answer: Yes, the spacings are equal at 8.5 millimeters each.

Reason: Subtract consecutive baselines: 18.5 minus 10 equals 8.5; 27 minus 18.5 equals 8.5; 35.5 minus 27 equals 8.5. All differences are the same, so the ruling is evenly spaced.

Check: Measure the same baselines on the printed sheet with a ruler and compare the differences; they should match within your measurement precision.

Task 2

A margin line is planned at 30 millimeters from the left edge. The punch-hole center line is at 12 millimeters from the left edge. What is the gap in millimeters? If the hole radius is 3 millimeters, does the hole edge reach the margin line?

Answer: The gap is 18 millimeters. The hole edge is at 12 plus 3 equals 15 millimeters, so it does not reach the margin line at 30 millimeters.

Reason: Subtract the hole center line from the margin line: 30 minus 12 equals 18 millimeters. Add the hole radius to the center line to find the hole edge: 12 plus 3 equals 15 millimeters. Since 15 is less than 30, there is a clear gap.

Check: Measure the margin line and hole edge on a test print and confirm the gap is positive and matches the calculation.

Task 3

A sheet is 11 inches tall. Three punch holes are spaced evenly with the top hole center 1 inch from the top edge and the bottom hole center 1 inch from the bottom edge. What is the distance between adjacent hole centers in inches?

Answer: The distance between adjacent hole centers is 4.5 inches.

Reason: The usable vertical distance between the top and bottom hole centers is 11 minus 1 minus 1 equals 9 inches. With three holes there are two equal gaps, so each gap is 9 divided by 2 equals 4.5 inches.

Check: Measure the top and bottom hole centers and the middle hole center on a test sheet; the two gaps should be equal and sum to 9 inches.

# Printable Wide-Ruled Loose-Leaf Paper: Layout, Margins, and Punch Holes

Original tasks 4 / complete keys

Task 4

A handwriting sample has lowercase letters with x-height from baseline to midline of 4 millimeters. An ascender rises 3 millimeters above the midline, and a descender falls 2 millimeters below the baseline. What is the total vertical span from the descender bottom to the ascender top?

Answer: The total vertical span is 9 millimeters.

Reason: The x-height is 4 millimeters. The ascender adds 3 millimeters above the midline, and the descender adds 2 millimeters below the baseline. The total is 4 plus 3 plus 2 equals 9 millimeters.

Check: Measure the baseline, midline, ascender top, and descender bottom on the sample with a ruler and confirm the total span is 9 millimeters.

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Worked example, Task 1, Task 2, Task 3, Task 4 / Separate answer sheet: worked example, exercise answers, reasoning, and check methods

Answer sheet only; not a student practice page.

Worked example: The margin line is 1.25 times 25.4 equals 31.75 millimeters from the left edge. The hole center line is 0.5 times 25.4 equals 12.7 millimeters from the left edge. The gap is 31.75 minus 12.7 equals 19.05 millimeters. These values are hypothetical examples until measured on a test print.

Exercise 1 answer: Yes, the spacings are equal at 8.5 millimeters each. Reasoning: Subtract consecutive baselines: 18.5 minus 10 equals 8.5; 27 minus 18.5 equals 8.5; 35.5 minus 27 equals 8.5. All differences are the same, so the ruling is evenly spaced. Check: Measure the same baselines on the printed sheet with a ruler and compare the differences; they should match within your measurement precision.

Exercise 2 answer: The gap is 18 millimeters. The hole edge is at 12 plus 3 equals 15 millimeters, so it does not reach the margin line at 30 millimeters. Reasoning: Subtract the hole center line from the margin line: 30 minus 12 equals 18 millimeters. Add the hole radius to the center line to find the hole edge: 12 plus 3 equals 15 millimeters. Since 15 is less than 30, there is a clear gap. Check: Measure the margin line and hole edge on a test print and confirm the gap is

positive and matches the calculation.

Exercise 3 answer: The distance between adjacent hole centers is 4.5 inches. Reasoning: The usable vertical distance between the top and bottom hole centers is 11 minus 1 minus 1 equals 9 inches. With three holes there are two equal gaps, so each gap is 9 divided by 2 equals 4.5 inches. Check: Measure the top and bottom hole centers and the middle hole center on a test sheet; the two gaps should be equal and sum to 9 inches.

Exercise 4 answer: The total vertical span is 9 millimeters. Reasoning: The x-height is 4 millimeters. The ascender adds 3 millimeters above the midline, and the descender adds 2 millimeters below the baseline. The total is 4 plus 3 plus 2 equals 9 millimeters. Check: Measure the baseline, midline, ascender top, and descender bottom on the sample with a ruler and confirm the total span is 9 millimeters.

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Source rubric / reflection

- [ ] Ruling is horizontal and evenly spaced, with measured baseline spacing recorded.
- [ ] Margin line is vertical and clear of the three punch holes.
- [ ] Three punch holes are present along the left edge and fit the measured binder.
- [ ] Handwriting sits on the baseline and lowercase x-height reaches the midline.
- [ ] Alternative letter styles are accepted if legible and consistent with the baseline and midline.
- [ ] All numerical values are labeled as hypothetical examples unless measured on the actual equipment.

Reflection: What did you check, what did you change, and what will you try next?