Math
Pacing

🎯 Learning Targets

1. Summarize the importance of pace during the ACT.

2. Pick a pacing plan that goes with your target Math score.

3. Practice using a pacing plan during a mini-test.

Pacing

Instructions

Fill out the chart below as your teacher leads the discussion.

> **ACT (Not So) Secrets:**
>
> ACT Math questions gradually become more difficult as you progress to the back of the test.
>
> You can use this fact to your advantage by selecting a pacing plan that is tailored to your target score. In these pacing plans, a section is a batch of 10 questions. Section 1 is questions 1–10, section 2 is 11–20, and so on. With 60 questions total, that means six sections to work through in 60 minutes. How long you spend on each section will depend on the pacing plan you choose.

|	Back-Guessing	Balanced	Blitz
Target Score	_____	_____	_____
Summary	Guess on the last 20 questions.	Move through each section in 10 minutes.	Accurately sprint through the front 30 in 20 minutes.
Guide	• Sections 1–3: 45 minutes • Section 4: 10 minutes • Sections 5–6: 5 minutes	• 10 minutes per section	• First 3 sections: 20 minutes • Last 3 sections: 40 minutes

Pacing Plans

____ **Back-Guessing:** The questions in the front of the test are easier and more likely to earn you points. Instead of wasting your time on tough questions at the end, focus only on what you need to reach your goal score and guess on the rest.

____ **Balanced:** You need some of the questions toward the back of the test to earn the score you want, so you balance your time between each section.

____ **Blitz:** You need to get most of the tough questions right to reach your goal score, but it will take time to work through all of those multi-part problems. To create the time you need, you (accurately) rush through the front sections of the test.
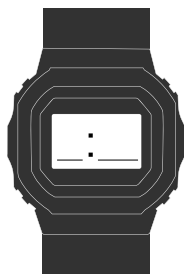
Instructions

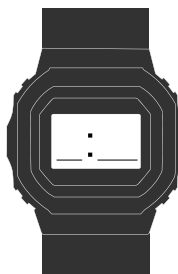Fill in the blanks with the times you should begin each section.

12:00   Set your watch to 12:00 at
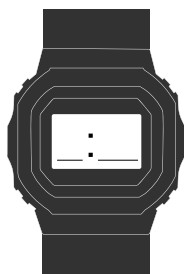   the beginning of the test.
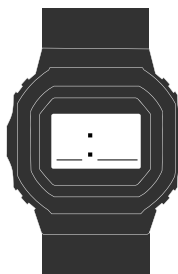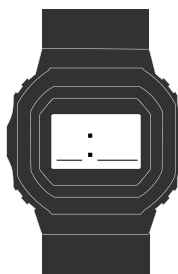
__:__   Section 5 (Questions 41–50)

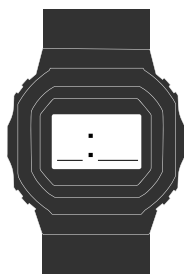__:__   Section 2 (Questions 11–20)

__:__   Section 6 (Questions 51–60)

__:__   Section 3 (Questions 21–30)

__:__   The test ends.
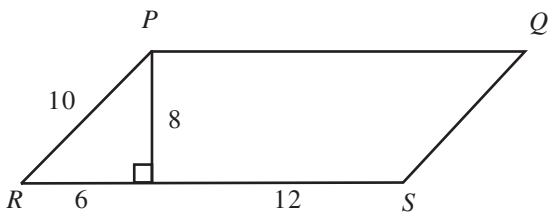
__:__   Section 4 (Questions 31–40)

Instructions

Complete the mini-test.

DO YOUR FIGURING HERE.

31. What is the slope-intercept form of $4x - y + 7 = 0$?

A. $y = -4x - 7$

B. $y = -4x + 7$

C. $y = x + \dfrac{4}{7}$

D. $y = 4x - 7$

E. $y = 4x + 7$

32. Parallelogram $PQRS$, with dimensions in feet, is shown in the diagram below. What is the area of the parallelogram, in square feet?

F. 48
G. 96
H. 120
J. 144
K. 180

33. The distance D, in feet, that a ball can be catapulted is given by the equation $D = \dfrac{2}{3}T + 10$, where T is the applied torque in newtons. What amount of torque, in newtons, must be applied for the ball's distance to be 170 meters?

A. 160
B. 200
C. 240
D. 320
E. 480

34. If $a = b - 3$, then $(b - a)^3 = $?

F. −81
G. −27
H. −9
J. 9
K. 27

35. Points *B* and *C* lie on line segment $\overline{AD}$, as shown below. Line segment $\overline{AD}$ is 40 units long, line segment $\overline{AC}$ is 15 units long, and line segment $\overline{BD}$ is 30 units long. How many units long, if it can be determined, is line segment $\overline{BC}$?

A. 20
B. 15
C. 10
D. 5
E. Cannot be determined from the given information

> Use the following information to answer questions 36–37.

English Enrollment

Course	Section	Period	Enrollment
Composition	A	1	12
English I	A	1	21
	B	4	19
	C	5	20
English II	A	2	15
	B	3	16
English III	A	2	14
English IV	A	3	19

36. What is the average number of students enrolled per section in English I ?

F. 17
G. 18
H. 19
J. 20
K. 21

37. The school owns 35 anthologies, which students are required to have during their English classes. There are 4 anthologies currently being re-covered, and 1 anthology is currently missing. For which of the following class periods, if any, are there NOT enough anthologies available for each student to have his or her own anthology?

  A. Period 1
  B. Period 1 & 2
  C. Period 1 & 3
  D. Period 2 & 3
  E. There are enough anthologies for each class period.

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38. After polling a class of 30 science students by a show of hands, you find that 12 students enjoy chemistry while 17 students enjoy biology. Given that information, what is the maximum number of students in this class who enjoy both chemistry and biology?

  F. 0
  G. 5
  H. 12
  J. 17
  K. 29

39. For all positive integers X, Y, and Z, which of the following expressions is equivalent to $\dfrac{Y}{Z}$?

  A. $\dfrac{Y}{Z} + \dfrac{X}{Y}$

  B. $\dfrac{Y \cdot Z}{Z \cdot Y}$

  C. $\dfrac{Y + X}{Z + X}$

  D. $\dfrac{Y \cdot X}{Z \cdot X}$

  E. $\dfrac{Y \cdot Y}{Z \cdot Z}$

40. If 120% of a number is 360, what is 50% of the number?

  F. 120
  G. 150
  H. 260
  J. 300
  K. 480