stems 8th Edition 8
NSWER. Write the word or phrase that best completes each statement or answers the question.
When is it possible for a vehicle to stop in a shorter distance without ABS than with ABS?
How does an active wheel speed sensor work?
What is the difference between a three- and a four-channel system?
What are the three stages of ABS operation?
How does an antilock braking system (ABS) work?

Answer Key

Testname: CHASSIS8_SHORT18

1) The shortest stops is when braking on loose gravel or dirt, or in deep, fluffy snow. Under these conditions, a locked wheel will stop the vehicle faster because loose debris builds up and forms a wedge in front of the tire that helps stop the vehicle.

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2) An active WSS is also called a digital wheel speed sensor because it generates a digital on and off output signal and is capable of detecting wheel speed as low as 0 mph (0 km/h).

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3) A three-channel antilock braking system controls each front wheel as a separate channel, but controls both rear wheels together as a single channel. Four-channel ABS controls all four-wheel brakes individually.

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- 4) The three stages of ABS operation include:
 - a. Pressure increase
 - b. Pressure hold
 - c. Pressure reduction

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5) An antilock braking system works by controlling brake fluid pressure to prevent wheel lockup during braking. Page Ref: 290