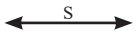
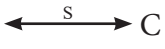
Some Train Diagramming Mini-Drill—Expanded Explanations

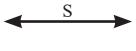
Following are the expanded explanations for the Some Train Diagramming Drill that appears in Chapter 13 of the *PowerScore LSAT Logical Reasoning Bible*.

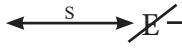
Question 1. Item: A  B  C

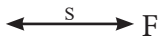
Correct answer: A  C

To make an inference with this relationship, we start by looking at the ends of the chain, namely A and C. C is at the end of a single arrow, and A is the open variable in the *some* relationship, so we should start at A. From A, we can ride over to station B because we get a free pass on the Some Train when we travel over *some*. Once at station B, we need a track "away" from B going to another station. Since arrows are the tracks in this analogy, we need either an *all* arrow, a double arrow, or a double-not arrow (*some* and *most* arrows do not count because they do not necessarily include the entire group). In this case we have an *all* arrow from B to C, and thus we can ride over to C. We now have a successful journey between A and C. Now, to make our inference, we look at two additional elements:

1. The weakest link in the chain
2. The presence of relevant negativity

In our example, the weakest link in the journey is *some*, and there are no negative terms. Thus, our inference is A  C.

Question 2. Item: D  F

Correct answer: D  F

This problem is identical to the problem in #1, with the addition of a negative on the middle term. Because E is a "midway stop" in the inference path, and E does not appear in the final inference, this negativity has no effect on the inference. In other words, the negativity on E is not relevant, and is therefore not a concern.

To make this inference, start at D. From D we can move to E via the *some.* Because there is an *all* arrow that then leads to F, we can move over to F. So, we started at D and ended at F, with the weakest link being *some.* The negativity on E wasn't relevant (it's just a way-station), and so our inference is "D some F," as diagrammed above.

Question 3. Item: G $\longrightarrow$ H $\overset{S}{\longleftrightarrow}$ I

Correct answer: None

This diagram appears quite similar to the diagram in #1, but it is slightly different, and that difference is significant enough to result in no inference being drawn. In this case, we start at I, since I is at one end of the chain and is involved in a *some* relationship. From I we can ride over to H. Once we arrive at H, is there a "track" leading away? No, there is only an incoming track from G, and thus we cannot travel further, and no inference can be drawn.

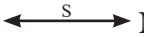
Question 4. Item: J $\longleftarrow$ K $\overset{S}{\longleftrightarrow}$ L

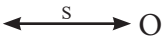
Correct answer: L $\overset{S}{\longleftrightarrow}$ J

This problem is the same as #1, with the difference that the relationships are presented in a mirror-image order (meaning that if you rotate this diagram around by 180 degrees, it would be identical to #1 in form). Because logic has no true "direction," this means that we should be able to get the same type of inference as was drawn in #1.

This diagram is also quite similar to #3, but the *all* arrow points the opposite direction. That difference proves crucial, and ultimately allows an inference to be drawn in this case (whereas in #3 it *stopped* the inference from being drawn).

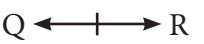
To make the inference, start at L, since L is at one end of the chain and is involved in a *some* relationship. From L we can ride over to K. Once we arrive at K, is there a "track" leading away? Yes, there is an outgoing track to J, and thus we can travel from L to J. The weakest relationship along the path is *some,* and there is no relevant negativity, so the inference is "L some J," as diagrammed above.

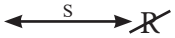
Question 5. Item: M  N  O

Correct answer: M  O

This problem is the same as #1, with the difference being that the second relationships is now a double arrow instead of just a single arrow. This has no adverse effect on our ability to make an inference, and thus we will be able to get the same type of inference as was drawn in #1.

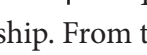
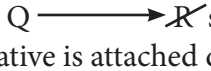
To make the inference, start at M, since M is at one end of the chain and is involved in a *some* relationship. From M we can ride over to N. Once we arrive at N, is there a "track" leading away? Yes, there is an outgoing track to O, and thus we can travel from M to O. The weakest relationship along the path is *some,* and there is no relevant negativity, so the inference is "M some O," as diagrammed above.

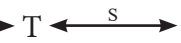
Question 6. Item: P  Q  R

Correct answer: P 

This problem is the same as #6, with the difference that the double arrow is now a double-not arrow. Does that change the inference? Yes, it does, so let's see what happens.

To make the inference, start at P, since P is at one end of the chain and is involved in a *some* relationship. From P we can ride over to Q. Once we arrive at Q, is there a "track" leading away? Yes, there is an outgoing track to R, and thus we can travel from Q to R. The weakest relationship along the path is *some,* and this time there is relevant negativity in the form of the negative between Q and R, so the inference is "P some not R," as diagrammed above. Note that the "not" is placed on R because the negative relationship is between Q and R (and the negative is not related to P).

Another way of thinking about the negative here would be to realize that the Q  R double-not arrow is the result of a regular Q  single arrow relationship. From that perspective, it is easier to see why the negative is attached directly to R.

Question 7. Item: S ⟷ T  U

Correct answer: U  *S*

This problem is the same as #6, with the difference that the relationships are presented in a mirror-image order (meaning that if you rotate this diagram around by 180 degrees, it would be identical to #6 in form). Because logic has no true "direction," this means that we should be able to get the same type of inference as was drawn in #6.

To make the inference, start at U, since U is at one end of the chain and is involved in a *some* relationship. From U we can ride over to T. Once we arrive at T, is there a "track" leading away? Yes, there is an outgoing track to S, and thus we can travel from U to S. The weakest relationship along the path is "*some,* and again there is relevant negativity in the form of the negative between T and S, so the inference is "U some not S," as diagrammed above. Note that as in #6, the "not" is placed on S because the negative relationship is between T and S (and the negative is not related to U).

Question 8. Item: V  X

Correct answer: None

This problem is the same as #3, with the difference that the relationships are presented in a mirror-image order (meaning that if you rotate this diagram around by 180 degrees, it would be identical to #3). Because logic has no true "direction," this means that we will get the same result as in #3.

In this case, we start at V, since V is at one end of the chain and is involved in a *some* relationship. From V we can ride over to W. Once we arrive at W, is there a "track" leading away? No, there is only an incoming track from X, and thus we cannot travel further, and no inference can be drawn.